DRAFT
ENVIRONMENTAL IMPACT REPORT

Paso Robles Property

Master Reuse Plan EIR

CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION

STATE CLEARINGHOUSE NUMBER 2009101039

August 2010

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ABBREVIATIONS AND ACRONYMS

°F	Fahrenheit
µg/L	micrograms per liter
10^{-6}	one-in-a-million
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily traffic
af	acre-feet
afy	acre-feet per year
ALUCPs	airport land use compatibility plans
ALUCs	airport land use commissions
ALUP	airport land use plan
APS	Alternative Planning Strategy
ARB	Air Resources Board
ASCE	American Society of Civil Engineers
ASTM	American Society of Testing and Materials
ATCM	Airborne Toxics Control Measure
B.P.	Before Present
BAAQMD	Bay Area Air Quality Management District
BACT	best available control technologies
bgs	below ground surface
BMPs	best management practices
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
Caltrans	California Department of Transportation
CAMP	construction activity management plan
CBC	California Building Code
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
CDHCD	California Department of Housing and Community Development
CDPH	California Department of Public Health
CEC	California Energy Commission
Census	U.S. Census Bureau

CEQA	State of California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHHSLs	California Human Health Screening Levels
CHP	California Highway Patrol
City	City of Paso Robles
City General Plan	City of Paso Robles General Plan
CLUPs	comprehensive airport land use plans
CMC-E	California Men's Colony East
CNDDB	California Natural Diversity Data Base
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
County	San Luis Obispo County
CPR	California Prison Health Care Receivership
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
cy	cubic yards
dB	decibels
dBA	A-weighted decibels
dBA/DD	dBA per doubling of distance
dbh	diameter at breast height
DD	doubling of distance
DEIR	draft environmental impact report
DFG	Department of Fish and Game
DJJ	Division of Juvenile Justice
DJJ facility	El Paso de Robles Youth Correctional Facility
DOT	U.S. Department of Transportation
DPM.	diesel-fueled engines
DTSC's	California Department of Toxic Substances Control's
DWQ	Division of Water Quality
EDD	California Employment Development Department
EIR	Environmental Impact Report
EMS	Emergency medical service

EPA	Environmental Protection Agency
EPCRA	Emergency Planning Community Right-to-Know Act
EPO	Education and Public Outreach
equivalent	average
ESA	Environmental Site Assessment
Estrella Facility	Level II Adult Correctional Facility
FAA	Federal Aviation Administration
FARs	Federal Aviation Regulations
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA's	Federal Highway Administration's
FIP	Federal Implementation Plan
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
g	gravity
GHG	greenhouse gas
GMP	groundwater management plan
gpm	gallons per minute
GWP	global warming potential
HAPs	hazardous air pollutants
HCM	Highway Capacity Manual
HCP	habitat conservation plan
HFCs	hydrofluorocarbons
high-pressure	compression
HMTA	Hazardous Materials Transportation Act
HSWA	Hazardous and Solid Waste Amendments of 1984
HVAC	heating, ventilation, and air conditioning
HWCA	Hazardous Waste Control Act
Hz	Hertz
in/sec	inches per second
IS/MND	initial study/mitigated negative declaration
KMnO4	potassium permanganate
kW	kilowatts
LEED®	Leadership in Energy and Environmental Design
Level I	minimum security
Level II	medium security
LID	Low-Impact Development
LIM	Land Inventory and Monitoring
LOS	level of service
LOS D operations	Level of Service
loudness	amplitude

low-pressure	rarefaction
LUST	leaking underground storage tank
Master Reuse Plan	Paso Robles Property Master Reuse Plan
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MEI	maximally exposed individual
MEP	Maximum Extent Practicable
mg/L	milligrams per liter
mgd	million gallons per day
MLD	Most Likely Descendant
MMRP	monitoring and reporting program
MMT	million metric tons
MOU	memorandum of understanding
mph	miles per hour
MPOs	Metropolitan Planning Organizations
MS4s	municipal separate storm sewer systems
msl	mean sea level
MT	metric tons
MTBE	methyl tertiary-butyl ether
MUN	Municipal and domestic supply
MUTCD	Manual on Uniform Traffic Control Devices
M_W	Moment magnitudes
MW	megawatts
MW-6	Monitoring Well 6
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCS	North County Shuttle
NEHRP.	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NESHAP	national emissions standards for HAPs
NFIP	National Flood Insurance Program
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	notice of preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OEHHA	Office of Environmental Health Hazard Assessment
PA	Public address
PCBs	polychlorinated biphenyls

PCE	perchloroethylene
PF	Public Facilities
PFCs	perfluorocarbons
PG&E	Pacific Gas & Electric Company
PI	plasticity index
PM_{10}	10 micrometers or less
$PM_{2.5}$	2.5 micrometers or less
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRCATS	Paso Robles City Area Transit System
PRPS	Paso Robles Public Schools
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Need Allocation
RMS	root mean square
ROCs	reactive organic compounds
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWD	reports of waste discharge
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAQMD,	South Coast Air Quality Management District
Scoping Plan	Climate Change Scoping Plan
SCRF	Secure Community Reentry Facility
SCS	Soil Conservation Service
SCS	Sustainable Communities Strategy
SEL	sound exposure levels
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SLO	San Luis Obispo
SLOALUC	San Luis Obispo County Airport Land Use Commission
SLOAPCD	San Luis Obispo Air Pollution Control District
SLOFCWCD	San Luis Obispo County Flood Control and Water Conservation District
SLORTA	San Luis Obispo Regional Transit Authority
SO_2,	sulfur dioxide
SoCal Gas	Southern California Gas Company
SO_X	oxides of sulfur
SPRR	Southern Pacific Railroad
SR	State Route
SRRE	Source Reduction and Recycling Element
SSMP	sewer master plan

stratosphere	upper atmosphere
SVP	Society of Vertebrate Paleontology
SWMP	stormwater management plan
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDS	Total dissolved solids
TMDL	total maximum daily load
ton/year	tons per year
TPHg	Total petroleum hydrocarbons
TPY	tons per year
troposphere	lower atmosphere
TUSD	Templeton Unified School District
U.S. 101	U.S. Highway 101
URBEMIS	Urban Emissions Model 2007 Version 9.2.4
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VdB	velocity decibels
VMT	vehicle miles traveled
WDRs	waste discharge requirements
WWTP	wastewater treatment plant
µin/sec	microinch per second

1 EXECUTIVE SUMMARY

1.1 SUMMARY DESCRIPTION OF THE PROPOSED ACTION

1.1.1 NEED FOR PROJECT AND ENABLING LEGISLATION

California Department of Corrections and Rehabilitation (CDCR) correctional facilities have been faced with severe inmate crowding conditions for several years. Since reaching a population record of more than 160,000 in October 2006, the state's adult prison institutions have operated at almost double their intended capacity. The housing of the inmate population has exceeded the rated capacity of institutions and has affected the physical plant and operations to the extent CDCR facilities are unable to operate efficiently. Because CDCR has insufficient celled and dormitory housing to accommodate the current and projected adult male population, CDCR has activated "non-traditional" temporary housing by converting existing program areas (i.e., gymnasiums and day rooms) to provide housing for the expanding population.

In response to the projected deficiency in the number of adult male inmate beds in the statewide prison system, the California Legislature passed Assembly Bill 900, the Public Safety and Offender Rehabilitation Services Act of 2007 (the Act). The Act authorizes CDCR to design, construct, or renovate prison housing units, prison support buildings and programming space to add up to 16,000 beds in several phases at CDCR facilities.

The Act also authorizes CDCR to establish county-based and/or regionally based reentry facilities throughout the state that will house a total of up to 16,000 inmates in several phases. CDCR has prepared a reentry bed plan to implement AB 900; the plan provides for 10,000 reentry beds. This legislation recognized the need to more effectively supervise offenders and provide expanded rehabilitative serves to inmates prior to their release. The Act requires CDCR to expand educational, vocational, and substance abuse treatment programs for incarcerated individuals prior to their parole. The Act also requires CDCR to develop a collaborative partnership with local governments, local law enforcement, and social service providers in the communities where reentry program facilities are built and operated because parolees are eventually returned to the county of their last legal residence.

1.1.2 PASO ROBLES PROPERTY MASTER REUSE PLAN

The former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility was closed in July 2008 in response to a substantial decline in the number of youthful offenders (wards) sentenced to state facilities. The State population is now at approximately 1,400 wards, which is a result of legislative actions that discouraged the use of State facilities when local juvenile programs could be more effective. The site also includes a State of California Department of Forestry and Fire Protection (CAL FIRE) camp and undeveloped land. CDCR believes the former DJJ site represents a potentially unique opportunity to reuse existing correctional facilities on State-owned land to help reduce overcrowding in the State prison system.

The Paso Robles Property Master Reuse Plan (Master Reuse Plan) involves four primary components within the approximately 160-acre project site: 1) conversion of the now-closed DJJ El Paso de Robles Youth Correctional Facility to a Level II Adult Correctional Facility (Estrella Facility), 2) construction of a Secure Community Reentry Facility (SCRF), 3) expansion of the existing CAL FIRE Los Robles Conservation Camp, and 4) use of the southwestern corner of the CDCR property to provide permanent tree replacement and habitat restoration.

ESTRELLA ADULT CORRECTIONAL FACILITY

The existing housing units that served the DJJ operation (a combination of dormitories and two-person, celled housing units) provide appropriate living quarters for inmates classified as Level II. CDCR would reuse buildings and infrastructure of the former DJJ facility to house up to a maximum of 1,000 adult inmates. Approximately 900 of these inmates would be classified as medium security or Level II. No higher security-level inmates would

be housed at the proposed Estrella Facility. Some additional new construction would be necessary to provide a full adult facility with an upgraded secure perimeter. The balance of the inmates to be housed at the Estrella Facility (approximately 100) would be classified as minimum security or Level I. All CDCR correctional facilities utilize Level I minimum security inmate crews for maintenance and support activities. Level I inmates typically may work outside of the secure perimeter; while Level II inmates also often perform maintenance and support services, these inmates would not be allowed outside the secure perimeter on work crews.

CENTRAL COAST REGIONAL SECURE COMMUNITY REENTRY FACILITY

CDCR proposes to construct and operate a 500-bed Central Coast Regional Secure Community Reentry Facility (reentry facility) in the northwestern portion of the CDCR property. These male inmates would be within 6-12 months of parole. The reentry facility would provide programs to assist in the successful transition of these inmates back into their county of last legal residence. The proposed Central Coast Reentry Facility would only serve inmates to be paroled to the counties of San Luis Obispo, Santa Barbara, and San Benito. CDCR reentry facilities are limited to a maximum of 500 inmates per Penal Code Section 6271(a).

CAL FIRE CONSERVATION CAMP

The existing CAL FIRE facility would be reactivated to provide wild land fire protection and maintenance services as a result of the implementation of the proposed Paso Robles Master Plan. Reactivation of the former institution-based DJJ camp would be achieved through the use of crews provided from the approximately 100 Level I minimum security inmates to be housed at the proposed adjacent Estrella Facility. The master plan also identifies an area in and immediately adjacent to the existing CAL FIRE support complex for the future construction and operation of a permanent stand-alone 130-bed conservation camp. Once constructed CAL FIRE would no longer need to depend on the use of inmate crews from the Estrella Facility. The full stand-alone camp would require the addition of support facilities such as inmate and staff living quarters, food service, training rooms, visitation areas, and administrative buildings.

ONSITE HABITAT RESTORATION AREA

Approximately 10–15 acres located in the southwestern portion of the CDCR property are proposed to be used as a habitat restoration area. This area would be restored to provide land for permanent tree replacement plantings for those trees removed from the CDCR property for the Master Reuse Plan and could provide other restored habitat onsite.

1.1.3 CEQA CONSIDERATIONS

The Estrella and reentry facilities would be funded through the authority of AB 900. Construction of the Master Reuse Plan is expected to begin in early 2011 and would be completed in approximately 28 months.

The Act does not prescribe that CDCR build prison space in any specific location. Rather, CDCR has discretion to determine the feasibility of sites. CDCR contemplated preparing a program EIR, pursuant to Section 15168 of the CEQA Guidelines, in connection with all the beds identified in the Act. Section 15168 allows, but does not require, a lead agency to prepare one program EIR for a series of actions, which can be characterized as one large project, and which are related in one or more ways, including “individual activities carried out under the same authorizing statutory authority and having generally similar environmental effects which can be mitigated in similar ways.” Although the Act authorizes construction of thousands of beds, it also establishes conditions under which the beds can be constructed. CDCR has not identified all the sites needed for construction of every bed. Further, environmental impacts are unique to each site; some sites may have some impacts that are similar, whereas others may have impacts that differ substantially. For these reasons, CDCR has concluded that the provisions of Section 15168 of the Guidelines would not be appropriate or applicable. CDCR has determined a

project EIR, as defined by CEQA Guidelines Section 15161, is the most appropriate CEQA document for evaluation of the Paso Robles Property Master Reuse Plan Project.

1.2 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

Table 1-1, located at the end of this chapter, provides a summary of the potential environmental impacts of the project, level of significance before mitigation, recommended mitigation measures, and the level of significance after the application of mitigation measures.

1.3 SUMMARY OF CUMULATIVE IMPACTS

The geographic area that could be affected by the project varies depending on the type of environmental resource being considered. As discussed in Section 5.2 of this Draft EIR, eight projects are being constructed, approved, or under review in the vicinity of the CDCR property within the City of Paso Robles. These cumulative projects, representing 2,061 new dwelling units and 460,000 square feet of commercial development, have some relation to the environmental impacts of the proposed project. The Master Reuse Plan would result in significant cumulative impacts to visual resources, air quality, greenhouse gas emissions, transportation, wastewater treatment and conveyance, and water supply (Option 2 and 3). A discussion of impacts associated with cumulative development is provided in Chapter 5, Cumulative Impacts, of this Draft EIR. Where a cumulative impact results in a mitigation measure not included in the Chapter 4, Environmental Setting, Thresholds of Significance, Environmental Impacts, and Mitigation Measures, a summary of that impact and the related mitigation measure(s) is included in the summary table below.

1.4 AREAS OF CONTROVERSY

Section 15123 of the California Environmental Quality Act (CEQA) Guidelines requires the summary section of an EIR to include “areas of controversy known to the lead agency.” The following issues, in no order of importance, are the controversial issues known to CDCR:

- Severe inmate overcrowding conditions statewide;
- Traffic safety and aesthetic concerns along Airport Road in the City of Paso Robles;
- Water availability concerns in the City of Paso Robles;
- Wastewater conveyance facilities.

1.5 SUMMARY OF ALTERNATIVES

1.5.1 NO PROJECT (NO DEVELOPMENT) ALTERNATIVE

Under this alternative no actions would be taken at the CDCR property. No development of the site or reuse of the former DJJ facility would occur. Current, highly limited, CAL FIRE operations would continue onsite. Under this alternative, the Public Safety and Offender Rehabilitation Services Act of 2007’s goal of increasing male adult inmate capacity and associated program and support space would not be met at the site, and bed shortages throughout the prison system would not be reduced. CDCR would be required to meet its needs for the beds it would have provided at the site at another prison site in the state prison system and a reentry facility would need to be constructed on a different site within the San Luis Obispo, San Benito, or Santa Barbara County to serve the anticipated number of inmates annually paroled to these three respective counties.

1.5.2 MITIGATED DESIGN ALTERNATIVE

In consideration of the requirements set forth by CEQA and the CEQA Guidelines, the Mitigated Design Alternative is intended to reduce the significant and significant and unavoidable impacts of the project. The purpose of the Mitigated Design Alternative evaluated herein is to identify and compare the environmental impacts that would occur if the Master Reuse Plan were located within a modified footprint on the CDCR property. Under this alternative, the proposed visitor parking lot would be relocated to the north of the proposed staff parking lot in an area that does not support drainages. The proposed CAL FIRE buildings would be shifted to the west to be further set back from Airport Road. Existing CAL FIRE buildings would remain in their existing locations. The proposed CAL FIRE ball field/recreation area would be located near Airport Road. These locations would serve to reduce the significant impacts identified for the proposed project related to visual and biological resources. All other project components would continue to be implemented as proposed. This alternative would attain all project objectives.

1.5.3 REDUCED DEVELOPMENT: ESTRELLA AND CAL FIRE CONSERVATION CAMP ONLY

With this alternative, the only activities at the CDCR property would be reuse of the DJJ facility and reactivation and expansion of the CAL FIRE Conservation Camp. The DJJ facility would be converted to a Level II adult inmate facility, surrounded by a lethal electrified fence. It would house up to 1,000 inmates. The CAL FIRE Camp would house up to 130 Level I inmates (under full conservation camp build out conditions). The design of both facilities would be the same as they are under the Master Reuse Plan and the restoration component would be implemented. The only difference is that the reentry facility would not be developed.

1.5.4 REDUCED DEVELOPMENT: REENTRY AND CAL FIRE CONSERVATION CAMP ONLY

With this alternative, the only activities at the site would be construction and operation of the reentry facility and reactivation and expansion of the CAL FIRE Conservation Camp. The DJJ facility would remain vacant. The reentry facility would house up to 500 inmates and the CAL FIRE Camp would house up to 130 Level I inmates. The design of both facilities would be the same as they are under the proposed project. The difference is that the DJJ facility would not be reused as a Level II facility, and no lethal electrified fence would be constructed.

1.5.5 OFFSITE LOCATION FOR REENTRY FACILITY ALTERNATIVE

This alternative considers constructing the proposed reentry facility at another site. The Estrella Facility, the CAL FIRE Conservation Camp expansion facility and the proposed restoration area would not be affected by this alternative. The reentry facility would be constructed in one of the three counties the reentry facility would serve: San Luis Obispo, San Benito, or Santa Barbara. In consideration of a location, it bears noting that in 2008, the Boards of Supervisors of all these three counties and the Paso Robles City Council voted to support the reentry facility in Paso Robles. However, prior to this, earlier in 2008, Santa Barbara County considered siting a reentry facility at its North County Jail facility, in the City of Santa Maria. Thus, this location is considered as the alternative location for a 500-bed reentry facility. The reentry facility would have been paired with expansion of the North County Jail. The site would be located on 50 acres, at the southwest corner of Black and Betteravia, in Santa Maria.

1.5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project (No Development) Alternative would be environmentally superior to the Master Reuse Plan project with respect to the following issues: air quality and climate change, biological resources, cultural resources, hydrology and water quality, noise, public services, transportation, utilities and service systems, and

visual resources. It would eliminate significant and unavoidable cumulative air quality impacts and project and cumulative impacts on some highway ramps, intersections, and roadway segments in the vicinity. It would eliminate potential short-term impacts to treated wastewater quality if the City's wastewater treatment plant upgrades are not completed prior to project operation, and would eliminate potential significant groundwater impacts if an entitlement to Nacimiento Lake water cannot be procured. It would be similar to the project with respect to employment, population and housing; hazards and hazardous materials; and land use and planning. Overall, this alternative is environmentally superior to the Master Reuse Plan. However, this alternative would not attain any of the objectives of the project.

The Mitigated Design Alternative would be environmentally superior to the project with respect to visual resources and biological resources. All other resource area impacts would be similar to the project. Further, this alternative would meet all project objectives; however, it could result in operational inefficiencies at the CDCR property that would result in safety and security operations that do not meet CDCR's standard programs and security protocol.

The Reduced Development: Estrella/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality and traffic, and to a lesser extent, biological resources. All other resource area impacts would be similar to the project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with the reentry facility, i.e., rehabilitation, preparing inmates to return to the community, and would not go as far as the project in meeting goals to increase system-wide bed capacity.

The Reduced Development: Reentry/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality, traffic, and biological resources. It would be inferior with respect to hazardous materials (they would not be remediated at the DJJ facility) and visual resources (due to decay and blight by abandoning the former DJJ facility). All other resource area impacts would be similar to the proposed project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with reuse of an existing State asset (former DJJ facility), and would not go as far as the project in meeting goals to increase system-wide bed capacity.

The Off-Site Location Alternative would be environmentally inferior to the project with respect to land use and planning (agricultural resources), public services (solid waste facilities), and visual resources. It would be superior to the project with respect to transportation and, potentially, wastewater (if upgrades to the City's treatment plant are not completed) and water (if Lake Nacimiento supplies cannot be procured). All other impacts would be similar. Overall, the project is environmentally superior to this alternative, although only slightly.

The No Project (No Development) Alternative is the overall environmentally superior alternative. In absence of the No Project Alternative, both Reduced Development Alternatives and the Mitigated Design Alternative would be environmentally superior to the project.

1.6 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines require a discussion of the significant irreversible environmental changes that would occur should the project be implemented. A discussion of these changes as they relate to the proposed project is provided below.

An example of significant irreversible environmental change is the irreversible and irretrievable commitment of resources (i.e. the permanent loss of resources for future or alternative purposes). Irreversible and irretrievable resources are those that cannot be recovered or recycled or those that are consumed or reduced to unrecoverable forms. The Master Plan Reuse would result in the irreversible and irretrievable commitment of energy and material resources during project construction, operation, and maintenance, including the following:

- construction materials, including such resources as rocks, wood, concrete, glass, roof shingles, and steel;
- land area committed to new project facilities;
- conversion of open space to prison uses;
- water supply for project operation;
- energy expended in the form of electricity, gasoline, diesel fuel, and oil for equipment and transportation vehicles that would be needed for project construction and operation.

The use of these nonrenewable resources is expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Further the reentry facility and the new buildings at the Estrella Facility would be designed to meet U.S. Green Building Council, Leadership in Energy and Environmental Design (LEED®) Silver design standards, which would reduce total demands for non-renewable resources. Long-term operational energy and natural resource consumption is expected to be significant, although it would not exceed the capacity of energy suppliers to meet local demand once the new infrastructure is in place. Construction activities would not result in inefficient use of energy or natural resources. Construction contractors selected would use best available engineering techniques, construction and design practices, and equipment operating procedures.

Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Air Quality			
Impact 4.1-1: Generation of Short-term Construction-Related Emissions of Criteria Air Pollutants and Precursors Construction-related activities would result in 3.9 ton/qtr of project-generated ozone precursor emissions, which exceeds SLOAPCD's significance threshold of 2.5 ton/qtr (Tier 1). Consequently, project-generated, construction-related emissions of ozone precursors could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this would be a significant impact.	S	**Mitigation Measure 4.1-1: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors** The following SLOAPCD-recommended standard mitigation measures, BACT, and off-site mitigation will be implemented by CDCR to reduce construction-related ozone precursor emissions. ► Maintain all construction equipment in proper tune according to manufacturer's specifications. ► Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (nontaxed version suitable for use off-road). ► Use diesel construction equipment meeting ARB''s Tier 3 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation. ► Use on-road heavy-duty trucks that meet ARB's 2010 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation. ► Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOX exempt area fleets) may be eligible by proving alternative compliance. ► Limit idling of all on and off-road diesel equipment to no more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.	LTS

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		► Prevent diesel idling within 1,000 feet of sensitive receptors. ► Do not located staging and queuing areas within 1,000 feet of sensitive receptors. ► Electrify equipment when feasible. ► Substitute gasoline-powered in place of diesel-powered equipment, where feasible. ► Use alternatively fueled construction equipment on-site where feasible (e.g., compressed natural gas, liquefied natural gas, propane, or biodiesel). ► Repower equipment with the cleanest engines available. ► Installing California Verified Diesel Emission Control Strategies. ► Pay into SLOAPCD's off-site NOx mitigation fund to further reduce construction-generated ozone precursor emissions that exceed SLOAPCD's quarterly Tier 1 significance threshold of 2.5 tons. The fee will be based on the current rate of $16,000 to reduce 1 ton of NOX. The determination of the final mitigation fee shall be conducted in coordination with SLOAPCD. The fee shall be paid to SLOAPCD in total before any ground disturbance.	
Impact 4.1-2: Generation of Long-Term Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursors Operational-related activities would result in project-generated unmitigated ozone precursor emissions (i.e., ROG + NO_x) of approximately 36.4 lb/day, which would exceed SLOAPCD's applicable threshold. With implementation of the Master Reuse	S	**Mitigation Measure 4.1-2: Generation of Long-Term Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursors** ► Implement continuous dust control measures (e.g., watering) in areas where dust emissions are visible; and CDCR will pay into SLOAPCD's off-site NOX mitigation fund to further reduce operational ozone precursor emissions that exceed	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Plan, operation-related activities would result in project-generated 36.4 lb/day of ozone precursor emissions, which exceeds SLOAPCD's significance threshold of 25 lb/day. Consequently, project-generated, operation- related emissions of ozone precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with air quality planning efforts. As a result, this would be a significant impact.		SLOAPCD's daily threshold of 25 lb/day. The fee will be based on the current rate of $16,000 to reduce 1 ton of NOX. The determination of the final mitigation fee will be conducted in coordination with SLOAPCD. The fee will be paid to SLOAPCD in total before any ground disturbance.	
Impact 4.1-3: Generation of Long-Term Operation-Related (Local) Mobile-Source Emissions of Carbon Monoxide Project-generated long-term operation-related local mobile-source emissions of CO would not violate or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations. As a result, this would be a less-than-significant impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.1-4: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants **Construction-Related Equipment Emissions** Construction-related activities would not result in project-generated DPM emissions that exceed the applicable SLOAPCD significance. In addition, the use of off-road heavy-duty equipment would be temporary and the nearest sensitive receptor is more than 500 feet from the project site (e.g., distance associated with a 70% decrease in emissions). Consequently, project-generated, construction-related emissions of TACs would not result in the exposure of sensitive receptors to substantial pollutant concentrations. As a result, this would be a less-than-significant impact. **Operation-Related Stationary-Source Emissions** CDCR would comply with applicable rules and regulation for any proposed stationary sources of TACs and implementation of the proposed project would not locate any proposed sensitive	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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receptors within ARB-recommended separation distances. Consequently, implementation would not result in the exposure of sensitive receptors (existing or proposed) to substantial pollutant concentrations from stationary sources. This would be a less-than-significant impact.			
Impact 4.1-5: Exposure of Sensitive Receptors to Odors Thus, the Master Reuse Plan would not be anticipated to result in the exposure of sensitive receptors to objectionable odors. As a result, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Biological Resources			
Impact 4.2-1: Impact to Sensitive Habitats Implementing the Master Reuse Plan could result in the fill, during construction of the Estrella Facility, of one ephemeral drainage that provides low-quality habitat. Because the habitat quality is low and is subject to continuous disturbance under existing conditions, this is not a significant impact to wetlands. Impacts on wetlands and waters would be less than significant. Five mature oak trees would be removed from the Estrella and reentry facility footprints, resulting in impacts to nesting and wildlife habitat. Impacts to oak trees would be potentially significant.	PS	**Mitigation Measure 4.2-1: Impacts on Sensitive Habitats** CDCR will implement the following measures to reduce impacts on native oak trees: ► Replace all native oak trees removed by project construction activity at an quarter inch-for-inch ratio. Replacement trees will be planted in the proposed restoration area (approximately 10 acres in size) in the southwest portion of the CDCR property. Within the proposed restoration area, an area will be specifically designated as a “native oak restoration zone.” CDCR will be responsible for ensuring that uses and activities not consistent with protection of replacement oaks are prohibited within the oak tree restoration area. ► Ensure that a restoration and maintenance plan is prepared by a qualified biologist. At a minimum, the restoration and maintenance plan will include the following information and/or adhere to the following guidelines: • A plant palette will specify the number of oaks to be planted, the specific location of the plantings, and sizes of planting containers. The plant palette will also specify any associated native planting. All associated planting and	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		maintenance activities will be consistent with maintaining healthy replacement trees developing oak woodland habitat similar in characteristic to valley oak woodland habitat located in the project vicinity. No ornamental trees and shrubs will be planted in the restoration area. • All replacement oak trees will originate from local genetic stock. The size of replacement trees will be selected to ensure long-term restoration success. Container plants will be planted after the onset of fall rains and before the end of January. • Before planting begins, the restoration area will be cleared of weedy vegetation that could compete for moisture and sunlight. Weed-free planting circles with 4-foot diameters will be established before the planting of oaks. • The restoration plan prepared for the Master Reuse Plan will include provisions for the installation of a temporary irrigation system. Irrigation guidelines and specifications will be developed by a qualified biologist and incorporated into the restoration plan. • The restoration plan will include a detailed description of recommended routine maintenance activities for the restoration area. Activities that are allowable and prohibited within the restoration area will be identified. • The restoration plan will include a 5-year monitoring plan and describe the information to be collected on an annual basis, including oak health, survival, and growth; evidence of natural oak recruitment; presence of noxious weed species; and detection of animal or insect damage to oaks. • The restoration plan will include annual success standards at regular milestones to help determine when the oak trees	

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		are established and self-sustaining. The primary success standards will include survival rates of oaks. The plan will include remedial measure that would need to be implemented if the success standards are not met at specified milestones. It is recommended that a minimum 80% survival rate be attained at the end of a 5-year period. The plan will describe remedial measures that will be implemented if the success standards are not met.	
Impact 4.2-2: Impacts on Special-Status Species Implementation of the Master Reuse Plan would result in the removal of mature valley oak trees that provide suitable nesting habitat for common and special-status raptors. Although habitat is only marginally suitable, burrowing owls and loggerhead shrike could potentially occur within proposed facility footprints. The loss of mature oak trees (suitable nesting habitat for common and special-status raptors), and the potential loss of burrowing owl and raptor nesting habitat would be a potentially significant impact.	PS	**Mitigation Measure 4.2-2: Impacts on Special-Status Species** If trees are removed between September 1 and February 15, then no mitigation will be required to reduce impacts on nesting raptors. If trees are removed between February 16 and August 31, CDCR will implement the following measures to reduce impacts on nesting raptors: ► Retain a qualified biologist to conduct preconstruction surveys for loggerhead shrike and active raptor nests on and within 0.5 mile of the 160-acre project site no more than 14 days and no less than 7 days before tree removal. If no active nests are found, then no further mitigation will be required. ► If active nests are found, ensure that the qualified biologist establishes a buffer around the tree where the active nest is located. No project activity will commence within the buffer area until the qualified biologist confirms that the nest is no longer active or that the young have fully fledged. Monitoring of the nest by a qualified biologist may be required if the activity has potential to adversely affect the nest. CDCR will implement the following measures to reduce impacts on burrowing owl: ► Retain a qualified biologist to conduct focused surveys for burrowing owls in areas of suitable habitat on and within 250 feet of the CDCR property. Surveys will be conducted before	LTS

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		project activity and in accordance with DFG protocol (DFG 1995). ► If no occupied burrows are found in the survey area, submit a letter report documenting survey methods and findings to DFG, and no further mitigation is necessary. If occupied burrows are found, to the extent feasible, establish a buffer of 165 feet around the occupied burrow during the nonbreeding season (September 1–January 31) or 250 feet during the breeding season (February 1–August 31). The size of the buffer area may be adjusted if a qualified biologist and DFG determine that adjusting the buffer size would not be likely to have adverse effects. No project activity will commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 6.5 acres of foraging habitat contiguous to the burrow will be preserved until the breeding season is over. ► If occupied burrows cannot be avoided, conduct on-site passive relocation techniques, approved by DFG, during the nonbreeding season to encourage owls to move to alternative burrows outside of the impact area. No burrows found by the survey to be occupied will be disturbed during the breeding season. After burrowing owls have been confirmed absent or removed from the site, the burrows may be destroyed.	
Impact 4.2-3: Impacts of Lethal Electrified Fence on Wildlife Operation of a lethal electrified fence at the proposed Estrella Facility would result in the death of an undetermined number of animals. The large majority of electrocutions would result in the death of birds, some of which are protected under MBTA and the Fish and Game Code. This impact would not eliminate any resident or migratory bird species and it is not expected to reduce species diversity in the project vicinity. Although not expected, it	PS	**Mitigation Measure 4.2-3: Impacts of Lethal Electrified Fence on Wildlife** CDCR will initiate coordination with USFWS and DFG regarding the proposed project and anticipated wildlife mortality and will take appropriate actions to minimize wildlife electrocutions to the extent feasible and compensate for unavoidable impacts on native wildlife species. It is anticipated that this would be accomplished using the tiered mitigation approach developed as part of the	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
is possible that the local population of one or more native birds, protected by MBTA and the Fish and Game Code, could be substantially affected. Therefore, this would be a potentially significant impact.		Statewide Electrified Fence Project, which includes the existing lethal electrified fences at CMC-E. Formal consultation with USFWS and DFG and permitting under ESA and CESA is not proposed because no federally listed or state-listed species or candidates for listing are considered at risk of electrocution. CDCR is committed to implementing the three tiers of mitigation outlined below to off-set potential adverse effects to birds protected under the MBTA and the California Fish and Game Code. ▸ *Tier 1:* The first tier of mitigation measures are those designed to eliminate or reduce wildlife attractants near the prison perimeter by implementing specific maintenance and operation procedures. By making the perimeter less hospitable, wildlife will frequent this area less often, thus reducing their exposure to accidental electrocution. Tier 1 maintenance and operation procedures will be developed specifically for the Estrella Facility and incorporated into a handbook and a training module to be used by CDCR staff when the proposed Estrella Facility becomes operational. ▸ *Tier 2:* Second-tier mitigation measures consist of both exclusion and deterrent devices. Tier 2 measures to be installed on the proposed lethal electrified fence include a vertical netting system and anti-perching devices. CDCR will install three-quarter-inch mesh vertical netting enveloping both sides of the lower section of the lethal electrified fence, which would otherwise present the greatest danger to wildlife species at risk of electrocution. Anti-perching wires, which consist of 2- to 4-inch pieces of stiff wire connected to an aluminum base, will be strategically attached to the tops of perching sites in and near the perimeter. Once installed, this wire will reduce the ability of birds to perch near the lethal electrified fence, thus reducing exposure to accidental electrocutions.	

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		▸ *Tier 3:* The third tier includes mitigation to compensate for residual wildlife mortality impacts. CDCR will provide funds for implementation of a habitat enhancement, creation, and/or management project that would improve opportunities for reproductive success of birds likely to be adversely affected by the project. Mechanisms for implementation of the mitigation would be similar to those previously utilized by CDCR for the Statewide and Six Prison Electrified Fence Projects and may include additional funding for a project to which CDCR has already contributed as part of these existing projects. The mitigation could be implemented at federal, state, or private lands located anywhere in California if they support a large percentage of the species at risk of electrocution at the proposed Estrella Facility. The amount of funding contributed would depend on the acreage of habitat that would benefit from the mitigation. The mitigation acreage required would be determined based on the anticipated annual mortality of native birds and the area required to support an equivalent number of individuals of the species at greatest risk of electrocution.	
Impact 4.2-4: Impacts to Wildlife Movement Implementation of the Master Reuse Plan would not substantially interfere with wildlife movement because the CDCR property does not link any areas of open space that serve as important wildlife habitat and does not serve as a wildlife migration corridor or wildlife nursery site. All proposed fences would be installed within or along the same alignment at the existing perimeter fence. This impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.2-5: Consistency with Local Plans, Policies, and Ordinances Because native tree species provide important habitat for special-status species and removal of mature trees (trees greater than 6 inches at dbh) could degrade this habitat, CDCR considers the removal of mature native trees at the Estrella Facility and reentry facility to be a significant impact.	S	CDCR will implement the measures outlined under Mitigation Measure 4.2-1 to reduce impacts on native oak trees.	LTS
Cultural Resources			
Impact 4.3-1: Construction-Related Impacts on Documented Significant Cultural Resources Implementation of the Master Reuse Plan would not result in any impacts on any documented cultural resources presently listed or possibly eligible for listing in the CRHR because no resources are known to be present within the CDCR property and none of the historic-era structures within the CDCR property appear to be associated with important historic events or persons at the national, state, or local level. Consequently, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.3-2: Construction-Related Impacts on Presently Undocumented Cultural Resources Because the facilities proposed under the Master Reuse Plan would be located in an area where “unique” or “historical” resources (per CEQA criteria) could be encountered during project implementation, disturbances of such resources would constitute a potentially significant impact.	PS	**Mitigation Measure 4.3-2: Impacts on Presently Undocumented Cultural Resources** If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains) is made during construction activities at the Estrella, CAL FIRE, and reentry site, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the CRHR and will develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.3-3: Construction-Related Impacts to Presently Undocumented Human Remains Because construction activities associated with the Master Reuse Plan could potentially result in the disturbance of presently undocumented prehistoric or historic-era interments, human remains, and/or associated grave-related articles, this impact would be potentially significant.	PS	**Mitigation Measure 4.3-3: Impacts on Presently Undocumented Human Remains** In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, potentially damaging excavation in the area of the burial will be halted and the San Luis Obispo County Coroner and a professional archaeologist will be contacted to determine the nature and extent of the remains. CDCR Project Director shall also be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050[c]). Following the coroner's findings, the State of California, CDCR contractor, an archaeologist, and the NAHC-designated Most Likely Descendant (MLD) will determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code. The State of California will ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be	LTS

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		discussed. Assembly Bill (AB) 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall implement one or more of the following measures: ► record the site with the NAHC or the appropriate Information Center, ► utilize an open-space or conservation zoning designation or easement, and/or ► record a document with the county in which the property is located. The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also reinter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.	
Employment, Population, and Housing			
Impact 4.4-1: Construction and Operational Population Growth Impacts. Implementation of the Master Reuse Plan would not result in growth that would exceed or be a substantial percentage of total population growth planned for by SLO County or the City of Paso Robles. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.4-2: Direct and Indirect Population and Housing Impacts from the Master Reuse Plan Based on studies of other similar facilities, implementation of the Master Reuse Plan would not result in the relocation of substantial numbers of families of inmates to the project area. Therefore, less-than-significant direct and indirect population and housing impacts would occur with implementation of the Master Reuse Plan.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.4-3: Construction and Operational Housing Impacts Because the region offers a large vacant housing base in addition to planned future housing growth, implementation of the Master Reuse Plan would not substantially decrease the available housing stock in surrounding communities and would not result, in and of itself, in the construction of substantial new housing in the study area. This impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Geology and Paleontology			
Impact 4.5-1: Impacts from Seismic Hazards Because facility design and construction would be required by law to conform to the CBC and other local planning regulations that contain specific design requirements to reduce damage from strong seismic ground shaking, and based on the site's soil and groundwater conditions, seismic hazards would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.5-2: Impacts from Shrink-Swell Hazards from Expansive Soils Although expansive soil properties are located on the CDCR property, CDCR would design all on-site facilities in accordance with CBC design standards, and thus appropriate site-specific engineering design measures would be implemented to minimize any potential soils impacts. This impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.5-3: Soil Erosion Impacts Because CDCR would implement appropriate stormwater controls in accordance with state requirements, the Master Reuse Plan would result in less-than-significant impacts related to soil erosion.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.5-4: Impacts on Paleontological Resources Construction under the Master Reuse Plan could potentially damage vertebrate fossils. This impact would be potentially significant.	PS	**Mitigation Measure 4.5-4: Impacts on Paleontological Resources** Before the start of grading, excavation, or demolition at the CAL FIRE or reentry facility locations, CDCR will retain a qualified paleontologist or archaeologist to alert all construction personnel involved with earthmoving activities, including the site superintendent, about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered. If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the CDCR Project Director. CDCR will retain a qualified paleontologist to evaluate the resource and prepare a mitigation plan in accordance with SVP guidelines (1996). The mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by CDCR to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Hazards and Hazardous Materials			
Impact 4.6-1: Creation of Hazards to the Public or the Environment through the Routine Use, Transport, or Disposal of Hazardous Materials The Master Reuse Plan would involve the storage, use, transport, and disposal of hazardous materials at the site during construction. In addition, because the Master Reuse Plan includes correctional, CAL FIRE Conservation Camp, and health care services facility uses, hazardous materials would be used during project operation. Use of hazardous materials at the site would be in compliance with federal, state, and local regulations, and all facility-related hazardous materials and associated activities are regulated by various government agencies. Because the Master Reuse Plan would implement and comply with existing regulations concerning the routine transport, use, handling, and disposal of hazardous materials, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.6-2: Exposure of Construction Workers and the Environment to Hazardous Materials Site soils and older buildings could contain hazardous chemicals or materials. Because the CDCR property could contain petroleum hydrocarbons, fuel oxygenates, PCBs, and hazardous building materials such as lead-based paint and asbestos-containing materials, as well as residual agricultural chemicals such as chlorinated pesticides, construction workers and the environment could be exposed to these materials. This impact would be potentially significant.	PS	**Mitigation Measure 4.6-2: Exposure of Construction Workers and the Environment to Hazardous Materials** Before any grading, construction, demolition, or renovation activities, CDCR will implement the following measures to address potentially contaminated soils and building materials on the CDCR property: ► Prepare a soil management plan that will include a site health and safety plan and other aspects, which could include but are not limited to a description of the distribution of known and potential soil contaminants, methods of containing contaminated soil, and procedures for the management and disposal of waste soils generated during construction activities. The plan will outline measures that will be employed to protect construction workers and the public from exposure to hazardous materials during demolition, renovation, and construction activities. The soil management	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		plan will be reviewed and approved by a Certified Industrial Hygienist before the start of earth-moving activities, and implemented by the selected contractor. (RWQCB, DTSC). ▸ In the event that contaminated groundwater is encountered during site excavation and construction activities, direct CDCR's contractor to report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminate before discharge in the sanitary sewer system. The contractor will be required to comply with all applicable federal, state, and local laws and regulations. ▸ In the event that contaminated soil is encountered during construction, complete soil removal activities in accordance with state and local regulatory requirements. CDCR will contact DTSC to discuss the findings and approach for remediation. Typically, DTSC requires a contractual arrangement (voluntary cleanup agreement) to fund its oversight costs during the removal action. If required by DTSC, CDCR will prepare a work plan for conducting additional investigations and will prepare a remedial action work plan before contaminated soil is excavated. The plan will outline measures for specific handling and reporting procedures for hazardous materials, and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility. The contractor will be required to comply with the plan and applicable federal, state, and local laws and regulations. ▸ In the event of discovery of an undocumented or previously unknown UST or agricultural structure (e.g., wells) on the CDCR property, cease all construction activities adjacent to the UST or structure and contact the City of Paso Robles Department of Emergency Services immediately. Any USTs or agricultural structures discovered during construction will	

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		be removed and any contaminated soils will be excavated and treated according to City of Paso Robles Department of Emergency Services procedures before the resumption of construction. ▸ Before demolition or renovation of any structures, test materials to be removed for the presence of asbestos and lead. Any lead-containing paint and asbestos-containing material encountered will be removed according to federal, state, and local regulations, including appropriate notification, equipment, handling, and disposal. Consistent with the requirements of the SLOAPCD, friable asbestos-containing material will be properly disposed of as asbestos waste in accordance with applicable air quality regulations. ▸ If loose and peeling paint is encountered during demolition or renovation, conduct sampling and analysis for leachable lead content to characterize the waste. As required by 8 CCR 1532.1, CDCR will provide monitoring of lead in the air, adaptive work practices, and respiratory protection to avoid exposure to the presence of even very low levels of lead where the lead is loose and peeling. ▸ Prepare a toxics management plan that will include a site health and safety plan and other aspects, which could include but will not be limited to a description of the distribution of known and potential PCBs, methods of containing PCB-contaminated materials, and procedures for the management and disposal of PCB-related waste generated during construction activities. The plan will outline measures that will be employed to protect construction workers and the public from exposure to PCBs during demolition, renovation, and construction activities. The plan will be reviewed and approved by a Certified Industrial Hygienist before the start of grading, construction, demolition, or renovation activities, and implemented by the selected contractor. PCBs will be	

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Table 1-1 Summary of Impacts and Mitigation Measures			
Impacts	**Significance Before Mitigation**	**Mitigation Measures**	**Significance After Mitigation**
		managed in accordance with applicable federal, state, and local laws and regulations.	
Impact 4.6-3: Potential for Safety Hazards Associated with Proximity to Paso Robles Municipal Airport Because the Master Reuse Plan would increase the number of nonconforming buildings at the CDCR property, and would result in the construction of two 35-foot-tall observation towers, five 35-foot-tall pole-mounted lights, and a lethal electrified fence, the Master Reuse Plan may be incompatible with the ALUP and could expose CDCR property occupants and aircraft to airport-related safety hazard. This impact would be potentially significant.	PS	**Mitigation Measure 4.6-3: Potential for Safety Hazards Associated with Proximity to Paso Robles Municipal Airport** Before approval of final project design plans, CDCR will notify the FAA in accordance with FAR Part 77, Section 77.17. CDCR will send one executed form set of FAA Form 7460-1, "Notice of Proposed Construction or Alteration" to the FAA regional office having jurisdiction over the project area. CDCR will also refer to the FAA's Obstruction Evaluation/Airport Airspace Analysis Web site for additional information and guidance (https://oeaaa.faa.gov/oeaaa/external/portal.jsp). If the FAA obstruction evaluation determines that any project features constitute a hazard to air navigation, then CDCR will proceed through any required or recommended FAA regulatory approval process, and implement mitigation measures as required by the FAA. The FAA evaluation can result in a determination that a project structure: ► does not require notice to the FAA, ► is not identified as an obstruction under FAR Part 77 criteria, ► is identified as an obstruction but would not be a hazard to air navigation, or ► is identified as an obstruction and would be a hazard to air navigation.	LTS
Hydrology and Water Quality			
Impact 4.7-1: Short-term, Construction-Related Water Quality Degradation While construction activities during implementation of the	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Master Reuse Plan would involve extensive grading and movement of soil, could generate sediment, erosion, and other nonpoint source pollutants in on-site stormwater, which could drain to off-site areas degrading local water quality, CDCR would comply with Central Coast RWQCB regulations that require the preparation of a SWPPP and implementation of BMPs that protect water quality and minimize erosion. This impact would be less than significant.			
Impact 4.7-2: Increase in Surface Runoff Potentially Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems Implementation of the proposed Master Reuse Plan would increase the amount of impervious surfaces at the CDCR property, thereby increasing surface runoff. This increase in surface runoff would result in an increase in both the total volume and the peak discharge rate of stormwater runoff, and could result in exceeding the capacity of onsite stormwater systems and greater potential for on- and of-site flooding. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 4.7-2: Increase in Surface Runoff Potentially Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems** Before any construction-related ground disturbance, final drainage plans will be completed to demonstrate that all runoff would be appropriately conveyed through the CDCR property and would not leave the property at rates exceeding pre-project runoff conditions. As part of the final design process, CDCR will coordinate with the City of Paso Robles to ensure that the proposed drainage plans are consistent with local requirements. The plan will include but not be limited to, the following items: ► an accurate calculation of pre-project and post-project runoff scenarios, obtained using appropriate engineering methods that accurately evaluate potential changes to runoff, including increased surface runoff; ► a description of the proposed maintenance program for the onsite drainage system; ► installation of a drainage basin to accommodate onsite stormwater flows designed to be consistent with the requirements of the City of Paso Robles SWMP and provide enough storage to accommodate the difference between calculated 10-year storm peak run-off of the existing site and the 100-year storm runoff of the developed site; and ► a description of the project-specific standards for installing drainage systems.	LTS

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Impact 4.7-3: Long-term Water Quality Degradation The conversion of undeveloped land to urban land uses would alter the types, quantities, and timing of contaminant discharges in stormwater runoff. Overall, the potential for the Master Reuse Plan to cause or contribute to long-term discharges of urban contaminants (e.g., oil and grease, trace metals and organics, trash) into the stormwater drainage system could increase compared with existing conditions. CDCR would comply with federal and state stormwater management regulations and would incorporate appropriate BMPs into project design to prevent long-term water quality degradation. This would be a less-than-significant impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.7-4: Groundwater Quality Degradation Associated with Improper Well Decommissioning Because CDCR would properly decommission any onsite wells that would not be used for irrigation or other potable uses, this would be a less-than-significant impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Land Use			
Impact 4.8-1: Potential for Division of an Established Community Implementing the Master Reuse Plan would not result in any physical barriers that would divide an established community, and proposed construction would be located entirely on State-owned property. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.8-2: Conflict with the City of Paso Robles Purple Belt Action Plan Implementing the Master Reuse Plan would not conflict with the Purple Belt Action Plan because proposed construction would be located on existing prison grounds and would continue existing land uses. The Master Reuse Plan would not affect any designated priority areas or implementation of the Purple Belt	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Action Plan. Therefore, this impact would be less than significant.			
Impact 4.8-3: Convert Important Farmland to Nonagricultural Uses Implementing the Master Reuse Plan would not convert Important Farmland to nonagricultural uses or cause changes that would result in the conversion of Important Farmland. The CDCR property is not designated as Important Farmland and proposed construction would be located on existing prison grounds and would continue existing land uses. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.8-4: Conflict or Result in the Cancellation of Existing Williamson Act Contracts Implementing the Master Reuse Plan would not conflict with existing Williamson Act contracts or result in the cancellation of such contracts. The CDCR property is not under Williamson Act contract and proposed construction would be located on existing prison grounds and would continue existing land uses. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Noise			
Impact 4.9-1: Exposure of Sensitive Receptors to Temporary Construction-Generated Noise in Excess of Applicable Standards With implementation of the Master Reuse Plan, noise from construction activity that occurs between 7 a.m. and 7 p.m. each day is exempt from the provisions of the applicable noise regulations under City of Paso Robles Code of Ordinances Section 9.07.030(i). CDCR proposes to conduct noise-generating construction activities during these hours. However, if construction activities by contractors were to occur during nonexempt noise-sensitive hours (i.e., evening, nighttime, and early morning) or if construction equipment is not properly	PS	**Mitigation Measure 4.9-1: Exposure of Sensitive Receptors to Temporary Construction-Generated Noise in Excess of Applicable Standards** CDCR will implement the following noise-reducing measures during all noise-generating construction activities: ▸ Conduct all noise-generating construction activities between 7 a.m. and 7 p.m., which is consistent with the City Noise Ordinance. ▸ Properly maintain construction equipment per manufacturers' specifications and fit equipment with the best available noise	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
equipped with noise control devices to reduce noise as much as is feasibly possible, project-generated noise levels from construction sources could exceed the applicable standards at nearby noise-sensitive receptors and could result in a substantial temporary increase in the ambient noise environment. Therefore, this impact would be potentially significant.		suppression devices (e.g., mufflers, silencers, wraps). All impact tools (e.g., jackhammers) will be shrouded or shielded and all intake and exhaust ports on power equipment will be muffled or shielded. ▸ Do not idle construction equipment for extended periods of time (i.e., more than 5 minutes) in the vicinity of noise-sensitive receptors. ▸ Locate fixed/stationary equipment (such as generators, compressors, rock crushers, and cement mixers) as far as possible from noise-sensitive receptors. ▸ Designate a disturbance coordinator, who will post contact information in a conspicuous location near the entrance so that it is clearly visible to nearby receptors most likely to be disturbed. The coordinator will manage any complaints resulting from the construction noise and will contact nearby noise-sensitive receptors, advising them of the construction schedule. If a complaint about construction noise is received more than once by an individual noise-sensitive receptor, CDCR will retain a qualified acoustical consultant to ensure compliance with applicable standards.	
Impact 4.9-2: Exposure of Sensitive Receptors to Permanent Transportation-Generated Noise in Excess of Applicable Standards With implementation of the Master Reuse Plan, predicted permanent transportation-generated noise would not expose sensitive receptors to a substantial increase in ambient noise levels in excess of applicable standards (3 dB or greater) . As a result, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.9-3: Exposure of Sensitive Receptors to Permanent Stationary Source-Generated Noise in Excess of Applicable Standards. With implementation of the Master Reuse Plan, most of the stationary noise sources that would be located at project facilities (i.e., parking lot activities, loading dock and delivery activity, mechanical HVAC equipment, PA system) would not result in noise levels at nearby noise-sensitive receptors that exceed the applicable City nontransportation (stationary) noise source criteria. Therefore, these noise sources would result in less-than-significant impacts. However, operation of emergency electrical generators located at proposed facilities could exceed stationary noise source criteria without additional shielding. As a result, this impact would be potentially significant.	PS	**Mitigation Measure 4.9-3: Exposure of Sensitive Receptors to Permanent Stationary Source-Generated Noise in Excess of Applicable Standards** To ensure that generator noise does not exceed applicable noise standards at nearby sensitive receptors, CDCR will locate new generators indoors, within an enclosure, or behind noise barriers to ensure a reduction of at least 20 dB outside the shielding, as measured at the property line, relative to normal operations.	LTS
Impact 4.9-4: Land Use Compatibility of Onsite Sensitive Receptors with the Ambient Noise Environment. With implementation of the Master Reuse Plan, predicted ambient exterior and interior noise levels would not exceed the state's recommended daytime or nighttime noise compatibility standards for prisons of 70 dB L_{eq} and 45 dB L_{eq}, respectively; nor would noise levels exceed applicable City noise standards or expose sensitive receptors to a substantial increase in ambient noise levels. As a result, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.9-5: Exposure of Sensitive Receptors to Temporary Increases to Groundborne Vibration in Excess of Applicable Standards Implementation of the Master Reuse Plan would not result in the exposure of sensitive receptors to groundborne vibration in excess of applicable standards. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Public Services			
Impact 4.10-1: Impacts to Police Protection Services CDCR provides its own security because it has sworn police officers; existing mutual aid agreements would remain in effect for emergency events, local law enforcement officers would not be required to substantially increase service levels to the CDCR property, and response times to the CDCR property would not increase. Therefore, less-than-significant impacts on police services would occur.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.10-2: Impacts on Fire Protection Services Implementation of the proposed Master Reuse Plan would not extend the service boundary of the City's Emergency Services Department and would not increase response times, and CDCR would include fire safety systems on all occupied structures, would provide backup emergency response through CAL FIRE, and would pay appropriate fee-schedule-based development impact fees for fire protection services and 911 emergency response. Therefore, implementation of the Master Reuse Plan would have a less-than-significant impact on fire protection and emergency services.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.10-3: Impacts to School Facilities Because of the declining enrollment in the three school districts and the resulting empty classrooms, implementation of the Master Reuse Plan would not result in the need to expand or construct new school facilities. The only exceptions could be the two middle schools in the Paso Robles Public Schools District, which are currently at capacity. However, increases in population resulting from the new positions created by the proposed facilities would be accommodated in the existing and planned housing within Paso Robles. New housing developments would be required to pay school impact fees. Further, for direct impacts on schools, California Government Code Section 65996 has deemed that payment of school fees by residential developers is	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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full mitigation of school impacts under CEQA. Pursuant to AB 900, Section 7005.5, CDCR would also contribute $600,000 as a result of the Estrella and reentry projects to the Superintendent of San Luis Obispo County Schools for distribution to affected school districts (AB 900 community mitigation funds are not available for the CAL FIRE Conservation Camp). It is expected that school impacts would be less than significant.			
Transportation			
Impact 4.11-1: Impacts on Operations at US 101 Southbound Ramps & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the unacceptable degradation of intersection operations during the p.m. peak hour at the U.S. 101 Southbound Ramps and SR 46 East intersection, which is below the Caltrans threshold of LOS C. This would be a significant impact.	S	**Mitigation Measure 4.11-1: Impacts on Operations at US 101 Southbound Ramps & SR 46 E Intersection** Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees for each respective project through the payment of City of Paso Robles development impact fees to construct a second westbound left-turn lane and third eastbound through lane at the U.S. 101 Southbound Ramp and SR 46 East intersection and widen the southbound on-ramp to provide two receiving lanes. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. This improvement would improve operations during the weekday a.m. and p.m. peak hours to LOS B and LOS C, respectively. Adequate right-of-way is available for this improvement and this improvement is currently under construction and will be complete prior to full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level.	LTS
Impact 4.11-2: Impacts to Intersection Operations at US 101 Northbound Ramps & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the degradation of the U.S. 101 Northbound Ramps and SR 46 East intersection to LOS D during the a.m. peak hour and exacerbation of unacceptable intersection operations during the p.m. peak hour. This would be a significant impact.	S	**Mitigation Measure 4.11-2: Impacts to Operations at US 101 Northbound Ramps & SR 46 E Intersection** Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees through the payment of City of Paso Robles development impact fees to construct two additional westbound through lanes at the U.S. 101 Northbound Ramp and SR 46 East intersection. This improvement	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		would improve operations acceptable LOS. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. Adequate right-of-way is available for this improvement and this improvement is currently under construction and will be complete prior to full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level.	
Impact 4.11-3: Impacts to Intersection Operations at Buena Vista Drive & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the acceptable operation of the Buena Vista Drive & SR 46 E intersection during AM and PM peak hours. This would be a less-than-significant impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-4: Impacts to Intersection Operations at Golden Hill Road & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the exacerbation of unacceptable operation conditions at the Golden Hill Road/SR 46 E intersection during the AM and PM peak hours. This would be a significant impact.	S	**Mitigation Measure 4.11-4: Impacts to Operations at Golden Hill Road & SR 46 E Intersection** Recently the City completed the construction of the following improvements to widen the Golden Hill Road and SR 46 East intersection to provide: ► two left-turn lanes, one through lane, and one shared through/right-turn lane (northbound); ► two left-turn lanes, one through lane, and one right-turn lane (southbound); and ► two left-turn lanes, two through lanes, and one right-turn lane (eastbound and westbound). The construction of these improvements would improve operations to LOS C during the a.m. and p.m. peak hours. No new significant impacts would occur with implementation of this mitigation, as they are already complete. With this improvement, this impact is reduced to a less-than-significant level.	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-5: Impacts to Intersection Operations at Union Road & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the exacerbation and further degradation of unacceptable operating conditions at the Union Road & SR 46 E intersection during the AM and PM peak hours and the MUTCD peak hour signal warrant would be met. This would be a significant impact.	S	**Mitigation Measure 4.11-5: Impacts to Intersection Operations at Union Road & SR 46 E Intersection** Upon authorization of the Estrella Facility or reentry facility, CDCR will coordinate with Caltrans to pay appropriate schedule-based fees toward the signalization of the Union Road and SR 46 East intersection and the construction of an overcrossing at Huerhuero Creek on the north side of SR 46 East on New Dry Creek Road to extend Union Road to Airport Road. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. With implementation of these improvements, this intersection would operate at LOS D during the a.m. and p.m. peak hour. Operations at this intersection would improve (LOS D), but not to an acceptable level based on Caltrans's standards. Intersection improvements at Union Road and SR 46 East and the Union Road extension and overcrossing of Huerhuero Creek are identified in the Administrative Draft of SLOCOG's *RTP-PSCS*. This improvement is in the early stages of planning; the next step includes the City pursuing completion of a Project Study Report (PSR). The Dry Creek Road overcrossing of Huerhuero Creek is included in the City's traffic impact fee program. Payment of the City's development impact fees would partially mitigate the impact at Union Road and SR 46 East. However, because the at-grade improvements at Union Road and SR 46 East have not yet been finalized by Caltrans, Caltrans is the agency responsible for implementing the improvements, and it is unknown whether the improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered significant and unavoidable.	SU

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-6: Impacts to Intersection Operations at Airport Road & SR 46 E Intersection Implementation of the Master Reuse Plan would result in the degradation of the Airport Road & SR 46 E intersection to unacceptable operating conditions (LOS F) during the AM and PM peak hours and the MUTCD peak hour signal warrant would be met. This would be a significant impact.	S	**Mitigation Measure 4.11-6: Impacts to Intersection Operations at Airport Road & SR 46 E Intersection** Caltrans is currently constructing the widening of SR 46 East from Airport Road to the Shandon rest stop provide two travel lanes in each direction. Completion of this improvement is anticipated before the buildout of the Master Reuse Plan. The widening plans include acceleration and deceleration lanes to improve merging maneuvers for left- and right-turning vehicles from the side streets. However, even with these proposed improvements, the side-street movement at Airport Road would operate with increased vehicular delays compared to existing conditions. With implementation of this improvement, the intersection operations would improve, but not to acceptable levels. The side-street left-turn movement would continue to operate at LOS F during the a.m. and p.m. peak hours. The only additional feasible mitigation available to improve operations at this intersection would be to widen the southbound approach to accommodate a 150-foot right-turn pocket. This improvement would improve operations at Airport Road and SR 46 East; however, the intersection would continue to operate at LOS F. This improvement is not included in the City's traffic impact fee program. It is unknown whether Caltrans would implement this mitigation, and if implemented, whether it would be installed before buildout of the Estrella or reentry facility (whichever comes first). If implemented before buildout of the Estrella or reentry facility, this impact would be reduced to a less-than-significant level. However, for purposes of CEQA, because CDCR does not control the timing of when this mitigation would be implemented, this impact is concluded to remain significant and unavoidable.	SU
Impact 4.11-7: Impacts to Operations at Jardine Road & SR 46 E Intersection Although implementation of the Master Reuse Plan would exacerbate unacceptable operating conditions of the Jardine Road and SR 46 E intersection, this intersection would not meet the MUTCD peak hour signal warrant criteria. Therefore, this impact would be less-than-significant based on MUTCD thresholds.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-8: Impacts to Operations at Airport Road & Old Dry Creek Road Intersection Although implementation of the with Master Reuse Plan would degrade the Airport Road & Old Dry Creek Road intersection to an unacceptable LOS F during the PM peak hour, this intersection would not meet the MUTCD peak hour signal warrant criteria. Therefore, this impact would be less-than-significant based on MUTCD thresholds.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-9: Impacts to Operations at Golden Hill Road & Union Road Intersection Implementation of the Master Reuse Plan would result in the further exacerbation of unacceptable operating conditions at the Golden Hill Road & Union Road intersection during the AM peak hour and the MUTCD peak hour signal warrant criteria would be met. This would be a significant impact.	S	**Mitigation Measure 4.11-9: Impacts to Intersection Operations at Golden Hill Road & Union Road Intersection** Before buildout of the Estrella Facility or reentry facility (whichever comes first), CDCR will contribute appropriate fee-schedule based fees through the payment of City of Paso Robles development impact fees to construct a roundabout at the Golden Hill Road and Union Road intersection with dual lanes in the southbound direction through the roundabout.	LTS
Impact 4.11-10: Impacts to Roadway Segments Implementation of the Master Reuse Plan would result in the continued acceptable operation of all study area roadway segments. This would be a less-than-significant impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-11: Public Transit Impacts While implementation of the Master Reuse Plan would generate demand for public transit services, no transit service is proposed to serve the site. Therefore, the Master Reuse Plan would not conflict with any existing or planned transit facilities. This impact would be less-than-significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-12: Impacts to Bicycle and Pedestrian Facilities Although implementation of the Master Reuse Plan would generate limited demand for bicycle and pedestrian facilities, the site is in a remote location where pedestrian access is limited, no bicycle facilities are provided near the site, and bicycle access from most of the city is difficult because of existing limited	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Table 1-1 Summary of Impacts and Mitigation Measures			
Impacts	**Significance Before Mitigation**	**Mitigation Measures**	**Significance After Mitigation**
connectivity. Bicycle lanes are planned along Airport Road, Dry Creek Road, and the future connections to Union and Golden Hill Roads and implementation of the Master Reuse Plan would not interfere with implementation of these facilities. Because the Master Reuse Plan would generate only limited demand for pedestrian facilities because of its remote location and would not preclude the future implementation of planned bicycle facilities, this impact would be less than significant.			
Impact 4.11-13: Site Access Impacts Implementation of the Master Reuse Plan would generate vehicular traffic that would cause an operational deficiency according to City standards at the Airport Road & Dry Creek Road intersection. This deficiency would occur on the western approach of Dry Creek Road for vehicles trying to make a left (southbound) turn onto Airport Road. This would be a significant impact.	S	**Mitigation Measure 4.11-13: Site Access Impacts** **Option A:** Before buildout of the Master Reuse Plan, CDCR will fully fund and will construct a center acceleration lane on Airport Road south of the east leg of Dry Creek Road to provide adequate queuing area so that westbound left-turning vehicles could make a two-stage left-turn—i.e., westbound left-turn vehicles could cross the northbound lane when an adequate gap in traffic occurs and then pause in the center acceleration lane before merging into the southbound lane on Airport Road. Adequate right-of-way is available and the improvement could be implemented using the existing width and the striped median between the intersections as shown in Exhibit 4.11-10. No new significant impacts would occur with implementation of this mitigation measure. With implementation of this improvement, the Airport Road/Old Dry Creek Road intersection would operate at an acceptable LOS C during the a.m. peak hour and LOS D during the p.m. peak hour. **Option B:** An alternative to mitigate the site access impact at Airport Road/Dry Creek Road intersection would be to stagger the administrative shifts at the Estrella and Reentry facilities so that vehicles arrive/depart during different times during the peak period. If the reentry facility's administrative staff shift ended at 4 p.m., while the Estrella staff ended at 5 p.m., the intersection of Airport Road/Dry Creek Road would operate at acceptable levels during the a.m. and p.m. peak hours, based on the City's thresholds. **Option C:** A third design option would be to provide access to the southern portion of the site from New Dry Creek Road through the	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		planned Winery Row Paso to the western property boundary. Two potential alignments are under consideration. One alignment involves extending the existing service driveway south to provide a connection between New Dry Creek Road and Old Dry Creek Road. The second would extend Old Dry Creek Road west toward Huerhuero Creek, and connect directly with New Dry Creek Road. These two options are presented in Exhibit 4.11-11. Either of these alternatives would remove the traffic generated by the Estrella Facility from the Airport Road and Old Dry Creek Road intersection, improving its operations to LOS D or better during the a.m. and p.m. peak hours, which are acceptable levels based on the City's LOS thresholds. The Airport Road and New Dry Creek Road intersection would also operate at acceptable levels during the a.m. and p.m. peak hours. Implementation of this alternative would result in additional construction and paving to connect Old and New Dry Creek Roads. In general, these impacts would be limited to biological resources, cultural resources, air quality and noise similar to the impacts identified in the DEIR. No new significant environmental impacts would occur with implementation of this mitigation. However, this option would require the purchase of property in order to secure access, which may not be feasible. **Option D:** The City has offered another design option for Airport Road. Under this option, CDCR would contribute funding to the development of conceptual plans for the easterly relocation of Airport Road and the construction of a roundabout at the intersection of Airport Road and the east leg of Dry Creek Road. The roundabout would be located south of the project's site access on Airport Road and it is anticipated that vehicles accessing the CDCR property would travel along the new alignment of Airport Road, travel through the roundabout, and access the old alignment of Airport Road in order to access the site. This design option may result in the removal of potential turning movement conflicts at Airport Road/Dry Creek Road; however, no detailed plans of this improvement are available to determine if this improvement could reduce the project's site access impacts to a less-than-significant	

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		level. While this design option would be set back Airport Road from the eastern fence line of the Estrella Facility (i.e., by approximately 50-100 feet), the current fence line proposal would not encroach upon Airport Road beyond its existing alignment. While views of the project site may be somewhat softened by the realignment of Airport Road because of the increased distance between the roadway and CDCR property, views of the proposed facility would still be a substantial component of the viewshed and no significant changes would occur. Finally, it is unclear whether this design option would provide any other safety benefits and because of the realignment it could result in potential safety hazards by introducing two curves in the roadway alignment. Therefore, for the reasons described above, insufficient information is available to determine whether this design option would eliminate the project's site access impacts. Further, even if it is determined that this design option were feasible, it is unknown when this improvement would be implemented and if it would be implemented in time for project operation. As a result, CDCR has concluded that this mitigation would not be feasible at this time.	
Impact 4.11-14: Emergency Access Impacts With implementation of the Master Reuse Plan, adequate emergency vehicle access would be provided via two access points to the CDCR property. These access driveways and roadways would be designed to accommodate large emergency vehicles in the event of an emergency. Therefore, this impact would be less-than-significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-15: Safety Hazard Impacts Due to a Design Feature Implementation of the Master Reuse Plan would not result in the construction or modification of any hazardous design features. Therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-16: Air Traffic Safety Hazards Implementation of the Master Reuse Plan would not result in a change in air traffic patterns, and the impact is considered less-than-significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-17: Construction-Related Traffic Impacts With implementation of the Master Reuse Plan, construction traffic could result in significant interim traffic impact to local roadways. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 4.11-17: Construction Traffic Impacts** The project's construction impacts would occur on an interim basis during the 28-month construction period. Construction of some of the recommended mitigation measures (i.e., those that are currently under construction by the City or Caltrans, and the construction of a southbound right-turn pocket at Airport Road and SR 46 East identified in Mitigation Measure 4.11-6) before project construction begins in January 2011 would mitigate the project's construction impacts to a less-than-significant level. However, implementation of many of the intersection improvements is not guaranteed, as they are under City of Paso Robles or Caltrans jurisdiction. Therefore, the project's construction impacts would remain significant and unavoidable on an interim basis during construction.	SU
Impact 4.11-18: Cumulative Impacts to Operation at the US 101 Southbound Ramps & SR 46 E Intersection With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS D operations at the US 101 Southbound Ramps & SR 46 E intersection during the PM peak hour. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-18: Cumulative Impacts to Operations at the US 101 Southbound Ramps & SR 46 E Intersection** Project-level mitigation was identified at the U.S. 101 Southbound Ramps and SR 46 East intersection (see Impact 4.11-1). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft RTP-PSCS and the 2009 Caltrans SR 46 East Comprehensive Corridor Study, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.	SU

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-19: Cumulative Impacts to Operations at US 101 Northbound Ramps & SR 46 E Intersection With implementation of the Master Reuse Plan, cumulative traffic would cause the US 101 Southbound Ramps & SR 46 E intersection to operate at LOS F during the AM and PM peak hours. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-19: Cumulative Impacts to Operations at US 101 Northbound Ramps & SR 46 E Intersection** Project-level mitigation was identified at the U.S. 101 Northbound Ramps and SR 46 East intersection (see Impact 4.11-2). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft RTP-PSCS and the 2009 Caltrans SR 46 East Comprehensive Corridor Study, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.	SU
Impact 4.11-20: Cumulative Impacts to Operations at Buena Vista Drive and SR 46 E Intersection With implementation of the Master Reuse Plan, the Buena Vista Drive and SR 46 East intersection would operate acceptably during the a.m. and p.m. peak hours. This would be a less-than-significant cumulative impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-21: Cumulative Impacts to Operations at Golden Hill Road & SR 46 E Intersection With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS D operations during the AM peak hour at the Golden Hill Road & SR 46 E intersection and would degrade operations to LOS E during the PM peak hour. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-21: Cumulative Impacts to Operations at Golden Hill Road & SR 46 E Intersection** Project-level mitigation was identified at the Golden Hill Road and SR 46 East intersection (see Impact 4.11-4). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft RTP-PSCS and the 2009 Caltrans SR 46 East Comprehensive Corridor Study, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.	SU

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-22: Cumulative Impacts to Operation at Union Road and SR 46 E With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the AM and PM peak hours at the Union Road & SR 46 E intersection. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-22: Cumulative Impacts to Operation at Union Road and SR 46 E** CDCR will implement Mitigation Measure 4.11-5 above, which identifies payment of fees towards signalization of Union Road and SR 46 East and construction of an overcrossing at Huerhuero Creek on the north side of SR 46 East on New Dry Creek Road to extend Union Road to Airport Road. With these improvements, the intersection would operate at LOS D during the a.m. and p.m. peak hours. The Dry Creek Road overcrossing of Huerhuero Creek is included in the City's traffic impact fee program. Payment of the City's development impact fees would partially mitigate the impact at Union Road and SR 46 East. However, because the at-grade improvements at Union Road and SR 46 East have not yet been finalized by Caltrans, Caltrans is the agency responsible for implementing the improvements and it is unknown whether the improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered significant and unavoidable.	SU
Impact 4.11-23: Cumulative Impacts to Operations at Airport Road & SR 46 E Intersection With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the AM and PM peak hours at the Union Road & SR 46 E intersection. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-23: Cumulative Impacts to Operations at Airport Road & SR 46 E Intersection** CDCR will implement Mitigation Measure 4.11-5 and 4.11-22 above. With these improvements, the intersection at Airport Road and SR 46 East would be restricted to right-turns in and out only (full access through a traffic signal at Union Road and SR 46 East). Because these improvements have not been planned for by Caltrans, Caltrans is the agency responsible for implementing the improvements, and it is unknown whether improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered cumulatively significant and unavoidable and the project's contribution would be considerable.	SU

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-24: Cumulative Impacts to Operations at Jardine Road & SR 46 E Intersection While implementation of the Master Reuse Plan would exacerbate unacceptable operations during the AM and PM peak hours at the Jardine Road & SR 46 E intersection, the peak hour signal warrant is not met. This would be a less-than-significant cumulative impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-25: Cumulative Impacts to Operations at Airport Road & Dry Creek Road Intersection While implementation of the Master Reuse Plan would degrade operation of the Airport Road and Dry Creek Road intersection to below the City's threshold of LOS D, the peak hour signal warrant is not met. Therefore, this would be less-than-significant cumulative impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.11-26: Cumulative Impacts to Operations at Golden Hill Road & Union Road Intersection With implementation of the Master Reuse Plan, the Golden Hill Road & Union Road intersection would degrade to LOS E during the PM peak hour. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-26: Cumulative Impacts to Operations at Golden Hill Road & Union Road Intersection** Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees through the payment of City of Paso Robles development impact fees to construct a roundabout at the Golden Hill Road and Union Road intersection with dual lanes in the southbound direction through the roundabout.[1] CAL FIRE would be responsible for paying their respective fees upon authorization of the project. This capacity enhancement would improve operations to an acceptable LOS. The City is investigating the acquisition of required right-of-way and this improvement is currently in the design phase and will be completed before full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level, and the project's contribution would be less-than-considerable.	LTS

[1] Union Road/Golden Hill Road roundabout evaluation completed by W-Trans (June 15, 2010).

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.11-27: Cumulative Impacts to Roadway Segments Implementation of the Master Reuse Plan would further exacerbate unacceptable operating conditions on the SR 46 E segments, between US 101 and Buena Vista Drive and between Union Road and Airport Road. This would be a significant cumulative impact, and the project's contribution would be cumulatively considerable.	S	**Mitigation Measure 4.11-27: Cumulative Impacts to Roadway Segments** The only feasible mitigation to reduce impacts along the SR 46 East segment, between U.S. 101 and Buena Vista Drive and the SR 46 East segment, between Union Road and Airport Road would be to widen SR 46 to six lanes (instead of four lanes), or upgrade the roadway to a four-lane limited-access freeway. These improvements are not consistent with the vision of the corridor as defined in the Administrative Draft of SLOCOG's RTP-PSCS and Caltrans' Comprehensive Corridor Study. At this time there are no known feasible improvements that can be implemented that fit the vision of the corridor. Therefore, this impact would remain cumulatively significant and unavoidable and the project's contribution would be considerable.	SU
Impact 4.11-28: Cumulative Site Access Impacts Implementation of Master Reuse Plan would generate vehicular traffic that would cause an operational deficiency according to City standards at the Airport Road & Dry Creek Road intersection. This deficiency would occur on the western approach of Dry Creek Road for vehicles trying to make a left (southbound) turn onto Airport Road during the PM peak hour. This would be a significant cumulative impact and the project's contribution would be considerable.	S	**Mitigation Measure 4.11-28: Cumulative Site Access Impacts** Implement design option A and C (combined) or B as described above in Mitigation Measure 4.11-13.	LTS
Utilities and Service Systems			
Impact 4.12-1: Wastewater Treatment Capacity Impacts Implementation of the Master Reuse Plan would not increase wastewater demands beyond the City's available wastewater treatment capacity. No new or expanded wastewater treatment facilities that could result in impacts on the environment would be required. However, the wastewater treatment plant is not in compliance with waste discharge requirements, particularly ammonia (as it relates to wastewater from the project); if the project is operational prior to completion of upgrades to the	LTS	CDCR will pay sewer connection fees, based on the City of Paso Robles per unit rate in effect at the time of project approval. These fees will be used to help pay the costs of upgrading the wastewater treatment plant. This measure would assure that CDCR contributes its fair share toward mitigation of this impact. Once the upgrades are constructed, the plant would be expected to meet water quality compliance restrictions. This would mitigate the impact to water	SU

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
wastewater treatment plant, it could contribute to violations of the waste discharge requirements. This would be a significant impact.		quality from the City of Paso Robles, and including the project. While CDCR's fee payment represents its proportionate contribution to funding mitigation of the water quality compliance issues at the treatment plant, the City of Paso Robles still needs to procure rate-based funding to construct and operate the improvements. Currently, there is no guarantee that fees will be collected in a manner timely enough to assure the upgrades will be in place by the time the project is operational, even though timely construction is planned. If this were the case, the project would potentially exacerbate the compliance issues, until such time that the plant upgrades are in place and operational. This would, therefore, be a potentially unavoidable significant short-term impact.	
Impact 4.12-2: Wastewater Collection and Conveyance System Impacts Implementation of the Master Reuse Plan would not exceed capacity of Lift Station 12, however overall development within the basin served by the lift station may result in exceedance of capacity. The peak wastewater flows generated by the Master Reuse Plan would exceed the capacity of the existing 8-inch sewer line. The impact on the sewer line would be significant.	S	**Mitigation Measure 4.12-2: Wastewater Collection and Conveyance System Impacts** ▸ CDCR will include in the final construction plans a combination of water conservation devices and wastewater control devices to limit peak-flow wastewater generation. This will be accomplished by installing a combination of the following devices and measures: • electronically-controlled flushometers on inmate toilets in celled housing units, which will limit the number of times a toilet can be flushed per hour; • low-flush toilets in all staff and visitor's bathrooms; • waterless urinals in all staff and visitor men's bathrooms; • low-flow shower heads in all showers; • low-flow faucets in all bathroom sinks; and • xeriscape or drought-tolerant landscaping. ▸ CDCR will monitor its wastewater use over an 18-month period and will pay additional sewer hook-up fees if the average use exceeds 100 gpd per inmate. The fee will be based	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		on the average 18-month generation, if it is above 100 gpd per inmate, calculated based on the City of Paso Robles per unit sewer hook-up rate in effect at the time. ► CDCR will pay appropriate sewer connection fees, based on its overall flow contributions, to upgrades to Lift Station 12. This payment, in combination with fees collected from other development, will allow the City of Paso Robles to upgrade the lift station sufficiently to meet capacity demands. In addition, CDCR will implement one or both of the following two options: **Option 1:** CDCR will upsize the existing 8-inch line to increase the peak-flow capacity by a minimum of 204 gpm (any reduction in this capacity must be based on revised flow calculations prepared by a licensed civil engineer in coordination with the City Public Works Department. The upsizing of the pipeline will require construction offsite; although the offsite pipeline easement is currently unvegetated (see Exhibit 4.12-1). The construction of the off-site portion of the upsized pipeline could result in impacts related to biological resources and cultural resources. No new significant environmental impacts would occur that have not been previously evaluated in this DEIR. Implementation of this mitigation measure would reduce this impact to a less-than-significant level because adequate wastewater conveyance capacity would be provided. **Option 2:** If the City has completed construction of the 18-inch sewer line in Airport Road, CDCR will connect to the 18-inch line (within the adjacent roadway). Implementation of this mitigation measure would reduce this impact to a less-than-significant level because adequate wastewater conveyance capacity would be provided.	

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Table 1-1 Summary of Impacts and Mitigation Measures			
Impacts	**Significance Before Mitigation**	**Mitigation Measures**	**Significance After Mitigation**
Impact 4.12-3: Impacts to Water Supplies and Facilities **Water Supply Option 1. CDCR Purchases Lake Nacimiento Surface Water Rights** Although the Master Reuse Plan would contribute to significant impacts identified in the EIR for the Lake Nacimiento Water Project, the County Board of Supervisors has fully considered these significant impacts and has adopted a statement of overriding considerations for the Lake Nacimiento Water Project. None of the impacts identified in the Nacimiento EIR would change as a result of the Master Reuse Plan, and they would occur with or without its implementation. Furthermore, it is assumed that the fees paid by CDCR for the purchase of Nacimiento water rights and the various connection fees paid to the City (i.e., hook-up fee for its water connection, meter fees) would constitute CDCR's fair share of the cost and would reimburse these agencies for the fair share for implementing the feasible mitigation measures identified in the Lake Nacimiento Water Project EIR. The Master Reuse Plan also would not increase the level of significance of any of the impacts described in the EIR. Furthermore, although the Master Reuse Plan would add up to 219 afy (equivalent to approximately 0.2 million gallons/day) to the design capacity of the City's planned water treatment plant, it would not result in additional significant environmental impacts, above and beyond those impacts identified in the December 2008 IS/MND (which were all determined to be less than significant with implementation of mitigation measures), especially because the plant is expandable from the currently planned 4 mgd to 6 mgd. Therefore, because the demand of the proposed project is equivalent to only 4% of the reserve capacity of the Lake Nacimiento Water Project, which is a reliable water source, and because CDCR would pay its fair share of the cost for treatment and mitigation, the Master Reuse Plan would result in less-than-significant water supply impacts.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS

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Water Supply Option 2. CDCR Utilizes City of Paso Robles Municipal Water (Including Groundwater) Although the City's 2005 UWMP indicates that sufficient water supplies are available to serve the Master Reuse Plan under Water Supply Option 2, the 2005 UWMP is based on two assumptions that are no longer valid: availability of 8,000 afy of Lake Nacimiento water and use of a sufficient amount of recycled water. The 2005 UWMP indicates that if these water sources are not available, the supply would be made up by continued use of groundwater, which would continue the decline of groundwater levels in the Estrella subarea and the larger Paso Robles Groundwater Basin. The Uptown EIR concludes similarly. Although the currently committed 4,000 afy of Nacimiento water would reduce the groundwater decline, because the basin is nearing overdraft conditions and these conditions are projected to exist when the project begins operation, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in potential overdraft. This impact would be significant.	PS	**Mitigation Measure 4.12-3b and c. Impacts on Water Supplies and Facilities. Option 2 and Option 3** The following mitigation measure will be implemented by CDCR: Before construction, CDCR will prepare landscape plans consistent with the requirements of the City's water efficient landscape ordinance, except where requirements could adversely affect security or public safety. The City would have no approval authority over the landscape plans, although CDCR intends to consult with the City of design and planting palettes. Implementation of this mitigation measure would reduce project water demand associated with landscaping and would avoid conflicts with the City's adopted ordinance. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because it is uncertain whether the City would be able to halt its current contribution to local declines in groundwater levels, any project contribution to this potential cumulative impact would be considered significant, even after reducing water demand to the extent feasible. This impact would remain significant and unavoidable.	SU
Water Supply Option 3. CDCR Continues Use of Onsite Wells Pumping additional groundwater to serve the Master Reuse Plan would contribute to the current chronic decline of groundwater in the area. Although use of the currently committed 4,000 afy of Nacimiento water would reduce the local groundwater decline by 59%, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in potential overdraft. This impact would be significant.	PS	**CDCR will implement mitigation measure 4.12-3b and c.** Implementation of the above mitigation measure would reduce project water demand associated with landscaping and would avoid conflicts with the City's adopted ordinance. However, because it is uncertain whether the City would be able to halt its current contribution to local declines in groundwater levels, any project contribution to this potential cumulative impact would be considered significant, even after reducing water demand to the extent feasible. This impact would remain significant and unavoidable.	SU

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Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Impact 4.12-4: Impacts to Solid Waste Facilities Implementation of the Master Reuse Plan would not substantially deplete remaining landfill capacity and, would not result in the need to expand or construct new solid waste disposal facilities. CDCR would comply with all federal, state, and local statutes and regulations related to solid waste; therefore, this impact would be less than significant.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.12-5: Impact to Electrical Facilities Implementation of the Master Reuse Plan would increase demand for electricity; however these demands would not exceed existing available electrical supplies and the construction of new or expanded facilities that could result in impacts to the environment would not be required. Therefore, the Master Reuse Plan would have a less-than-significant impact on electricity services.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.12-6: Impacts to Natural Gas Facilities Implementation of the Master Reuse Plan would increase the demand for gas. Because the proposed project is in the early planning stages, the specific demand generated by the project cannot be determined with certainty, and, SoCal Gas is not available to provide data on the available capacity of their existing gas pipeline in Airport Road. Therefore, the project has the potential to exceed the capacity of this pipeline and a potentially significant impact could result.	PS	**Mitigation Measure 4.12-6: Impacts on Natural Gas Facilities** Before initiating construction, CDCR will provide SoCal Gas with a detailed list of gas-fired equipment to be used during operation. The list will include the size and running time of each piece of equipment. CDCR will coordinate with SoCal Gas regarding the capacity of the existing gas pipeline within Airport Road. If SoCal Gas determines that the existing line has capacity, or that the capacity can be increased by other means (i.e., increasing line pressure), then no further mitigation is necessary. If a larger gas line is determined to be necessary to accommodate the project's gas demand, CDCR will either install the new gas line, or pay appropriate fees to SoCal gas for installation of a new gas line.	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Visual Resources			
Impact 4.13-1: Potential for Damage to Scenic Resources The Master Reuse Plan would not be visible from a State-designated scenic highway and the CDCR property does not support any visually significant scenic resources (i.e., trees and rock outcroppings). As a result, implementation of the Master Reuse Plan would not have a substantial adverse effect on any such resources. This would be a less-than-significant scenic view impact.	LTS	No significant impacts would occur; therefore, no mitigation is required.	LTS
Impact 4.13-2: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings **Viewpoint 1: Airport Road (South)** Implementation of the Master Reuse Plan would result in changes to views of the site from Viewpoint 1. Although the proposed reentry and CAL FIRE facilities would not be visible from this location, the Estrella Facility would dominate middle-ground views and would primarily consist of buildings screened/muted by the electrified fence. Although views would change from primarily building frontages to a fence line, this change would not be substantial in relation to the existing visual character of the site from this viewpoint. This impact would be less than significant. **Viewpoint 2: Airport Road (South of Dry Creek Road)** Implementation of the Master Reuse Plan would result in minor changes to views of the site from Viewpoint 2. The reentry and CAL FIRE facilities would not be visible from this location because views would be blocked by existing on-site buildings. Buildings associated with the Estrella Facility currently dominate and would continue to dominate foreground views. The Master Reuse Plan would generally screen some existing buildings and remove others. This impact would be less than significant. **Viewpoint 3: Airport Road (East of Administration Building)** Implementation of the Master Reuse Plan would result in minor	S	**Mitigation Measure 4.13-2d through h: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings (Viewpoints 5 through 7 and overall visual change)** The following mitigation measures will be implemented by CDCR: ► Use paint and design elements on the new entrance sign that generally reflect the character of the Paso Robles Inn or the City of El Paso De Robles city limits sign to better reflect the visual character of the city. ► Landscape in and around the entrance sign enlarged parking lot planter beds, and in front of the existing administration building. Some of these design elements have been simulated or are shown for illustrative purposes through representative photographs to determine their relative effect on views of the CDCR property from off-site locations. Exhibit 4.13-11 presents an entrance sign and landscaping mitigation concept for the Master Reuse Plan from the Airport Road (South of Dry Creek Road) viewpoint. This viewpoint was selected because it shows the area of the site that has the fewest security-related restrictions related to mitigated design concepts. As can be seen from the visual simulation, the entrance sign and landscaping add some character that is representative of the city of Paso Robles. CDCR will also consider	SU

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
changes to views of the site from Viewpoint 3; however, views would continue to be of a correctional institution and would generally be of the same development intensity as existing structures at the CDCR property. Views of the proposed reentry and CAL FIRE facilities would not be available and would be blocked by on-site building and perimeter fencing. This impact would be less than significant. **Viewpoint 4: Airport Road (Northeast of Library/Vocational School Building)** From Viewpoint 4, implementation of the Master Reuse Plan would result in substantial changes of views of the site including changing views from a more school yard/facility appearance to a correctional institution. This would be a significant impact. **Viewpoint 5: Airport Road (Northeast of Athletic Field)** From Viewpoint 5, implementation of the Master Reuse Plan would result in substantial changes to views of the site including e densification of fencing and onsite building and the removal of onsite trees. This would be a potentially significant impact. **Viewpoint 6: Airport Road (East of Undeveloped Portion of Site)** From Viewpoint 6, implementation of the Master Reuse Plan would substantially alter the visual setting by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. This would be a significant impact. **Viewpoint 7: Airport Road (Southeast of existing CAL FIRE operations)** Implementation of the Master Reuse Plan would substantially alter the visual setting from Viewpoint 7 by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. Further views of distant hillside and ridgeline areas would be almost completely		other representative building design façades representative of Paso Robles (Exhibit 4.13-12) in the design of entrance facilities. Although CDCR will make its best effort to design facilities to reduce visual impacts, the Master Reuse Plan would nevertheless result in a substantial change in the local viewshed. Impacts would be substantially reduced through implementation of the above measures. However, because of the physical limitations of the site (e.g., existing buildings, limited on-site space, and lack of right-of-way) and required security protocols, other design treatments (e.g., facades, landscaping, architectural additions) are not feasible. Therefore, significant and unavoidable impacts would still result for the following viewpoints: ▸ Viewpoint 4, ▸ Viewpoint 5, ▸ Viewpoint 6, ▸ Viewpoint 7, and ▸ overall visual change.	

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
blocked from this viewpoint. This impact would be significant. **Overall Visual Change: Master Reuse Plan** Overall, the CDCR property would take on the appearance of a more densely developed facility. It would more obviously be a correctional facility, with security fencing dominating much of the viewshed. Given the site's location within a visual gateway to the city of Paso Robles, this impact would be significant.			
Impact 4.13-3: New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area Implementation of the Master Reuse Plan would substantially alter the areas lit and intensity of lighting onsite. This would be a significant impact.	S	**Mitigation Measure 4.13-3: New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area** CDCR considered several design options to reduce potential significant visual impacts. Regarding lighting, CDCR already uses state-of-the-art lighting in all its new facilities. This lighting is designed to cast light only where needed, and to cut off glare to off-site areas. There are no other known measures that CDCR can implement that would provide sufficient lighting to maintain security needs without some of this light being visible off the CDCR property. Therefore, nighttime lighting impacts would remain significant and unavoidable.	SU
Cumulative Impacts Resulting in New Mitigation			
The Master Reuse Plan would be anticipated to generate GHG emissions, directly or indirectly, that may have a significant impact on the environment. As a result, this incremental increase in GHGs would be cumulatively considerable and significant.	S	**CDCR will implement mitigation measure 4.1-2.** Implementation of the above mitigation measure would reduce GHG emissions, but not to a level that would not be cumulatively considerable. Therefore, this impact would remain cumulatively significant and unavoidable and the project's contribution would be considerable**.**	SU
Peak (mitigated) wastewater flows generated by the Master Reuse Plan could contribute to a potential exceedance of the capacity of Lift Station 12. This would be a significant impact and the Master Reuse Plan contribution would be cumulatively considerable.	S	CDCR will pay appropriate fees based on the project's flow contribution (currently estimated to be approximately 16%) to the City toward the upgrade of Lift Station 12.	LTS

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Table 1-1
Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of Water Supply Option 2 under the Master Reuse Plan could contribute to potential future overdraft conditions of the local groundwater basin. This would be a significant and unavoidable cumulative impact and the Master Reuse Plan's contribution would be considerable.	S	**CDCR will implement Mitigation Measure 4.12-3b.** Implementation of this mitigation would reduce water demand associated with landscaping. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because of local declines in groundwater levels, any contribution to this potential cumulative impact would be considerable. This impact would remain significant and unavoidable.	SU
Implementation of Water Supply Option 3 under the Master Reuse Plan could contribute to eventual overdraft conditions of the local groundwater basin. This is a significant cumulative impact and the project's contribution would be considerable.	S	CDCR will implement I Mitigation Measure 4.12-3c. Implementation of this mitigation would reduce water demand associated with landscaping. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because it is uncertain whether the City would be able to halt its current contribution to local declines in groundwater levels, any contribution to this potential cumulative impact would be considerable. This impact would remain significant and unavoidable.	SU

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2 INTRODUCTION

This chapter provides the reader with an overview of the *Paso Robles Property Master Reuse Plan* (Master Reuse Plan); background on the purpose, focus, and use of the draft environmental impact report (DEIR); a summary of the public review and participation process; and a description of the terminology used herein. A detailed description of the project is provided in Chapter 3, "Project Description."

2.1 PURPOSE AND INTENDED USE OF THE ENVIRONMENTAL IMPACT REPORT

California Department of Corrections and Rehabilitation (CDCR) correctional facilities have been faced with severe inmate crowding conditions for several years. Since reaching a population record of more than 160,000 in October 2006, the state's adult prison institutions have operated at almost double their intended capacity. The housing of the inmate population has exceeded the rated capacity of institutions and has affected the physical plant and operations to the extent CDCR facilities are unable to operate efficiently. Because CDCR has insufficient celled and dormitory housing to accommodate the current and projected adult male population, CDCR has activated "non-traditional" temporary housing by converting existing program areas (i.e., gymnasiums and day rooms) to provide housing for the expanding population. In response to the severity of the prison crowding problem, Governor Arnold Schwarzenegger declared a state of emergency on October 4, 2006, that describes "conditions of extreme peril" that threaten "the health and safety of the men and women who work inside [severely overcrowded prisons] and the inmates housed in them."

The former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility was closed in July 2008 in response to a substantial Statewide decline in the number of youthful offenders (wards) sentenced to state facilities. The State population is now at approximately 1,400 wards, which is a result of legislative actions that discouraged the use of State facilities when local juvenile programs could be more effective. The site also includes a State of California Department of Forestry and Fire Protection (CAL FIRE) camp and undeveloped land. CDCR believes the former DJJ site represents a potentially unique opportunity to reuse existing correctional facilities on State-owned land to help reduce overcrowding in the State prison system.

The Master Reuse Plan involves four primary components within the approximately 160-acre project site: 1) conversion of the now-closed DJJ El Paso de Robles Youth Correctional Facility to a Level II Adult Correctional Facility (Estrella Facility), 2) construction of a Secure Community Reentry Facility (reentry facility), 3) expansion of the existing CAL FIRE Los Robles Conservation Camp, and 4) use of the southwestern corner of the CDCR property to provide permanent tree replacement and habitat restoration.

1. **Estrella Adult Correctional Facility.** This proposed facility would reuse buildings and infrastructure of the former DJJ facility to house up to a maximum of 1,000 adult inmates. Approximately 900 of these inmates would be classified as medium security or Level II. No higher security-level inmates would be housed at the proposed Estrella Facility. Some additional new construction would be necessary to provide a full adult facility with a upgraded secure perimeter.

   The balance of the inmates to be housed at the Estrella Facility (approximately 100) would be classified as minimum security or Level I. All CDCR correctional facilities utilize Level I minimum security inmate crews for maintenance and support activities. Level I inmates typically may work outside of the secure perimeter; while Level II inmates also often perform maintenance and support services to a prison they would never be allowed outside the secure perimeter on work crews.

2. **Central Coast Regional Secure Community Reentry Facility.** CDCR proposes to construct and operate a 500-bed secure reentry facility in the northwestern portion of the CDCR property. These male inmates would be within 6-12 months of parole. The reentry facility would provide programs to assist in the

successful transition of these inmates back into their county of last legal residence. The proposed Central Coast Reentry Facility would only serve inmates to be paroled to the counties of San Luis Obispo, Santa Barbara, and San Benito. CDCR reentry facilities are limited to a maximum of 500 inmates per Penal Code Section 6271

3. **CAL FIRE Los Robles Conservation Camp Reactivation and Construction**. The existing CAL FIRE facility would be reactivated to provide wild land fire protection and maintenance services as a result of the implementation of the proposed Paso Robles Master Reuse Plan. Reactivation of the former institution-based DJJ camp would be achieved through the use of crews provided from the approximately 100 Level I minimum security inmates to be housed at the proposed adjacent Estrella adult correctional facility. The Master Reuse Plan also identifies an area in and immediately adjacent to the existing CAL FIRE support complex for the future construction and operation of a permanent stand-alone 130-bed conservation camp. Once constructed CAL FIRE would no longer need to depend on the use of inmate crews from the Estrella Facility. The full stand-alone camp would require the addition of support facilities such as inmate and staff living quarters, food service, training rooms, visitation areas, administrative buildings,

4. **On-site Habitat Restoration Area.** Approximately 10–15 acres located in the southwestern portion of the CDCR property are proposed to be used as a habitat restoration area. This area would be restored to provide land for permanent tree replacement plantings for those trees removed from the CDCR property for the Master Reuse Plan and would provide other restored habitat on-site.

The purpose of the DEIR is to evaluate the potential environmental effects of the project, in conformance with the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.), as amended. CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority.

A DEIR is a public, informational document used in the planning and decision-making process. The DEIR assesses the environmental effects related to the planning, construction, and operation of a project and indicates ways to reduce or avoid possible environmental damage. The DEIR also discloses significant environmental impacts that cannot be avoided, any growth-inducing impacts of a project, effects found not to be significant, and significant cumulative impacts of past, present, and reasonably foreseeable future projects in combination with the impacts of the project. Mitigation has been recommended where feasible to reduce or avoid the project's impacts. These mitigation measures, including a description of the timing of implementation, agency responsibility, and monitoring requirements, will be described in a mitigation monitoring and reporting program (MMRP) document. Once the EIR is finalized, the MMRP will be prepared by CDCR for consideration along with the project and the EIR in the project approval process.

As an informational document for decision makers, a DEIR is not intended to recommend either approval or denial of a project. CEQA requires the decision makers to balance the benefits of a project against its unavoidable environmental risks. If environmental impacts are identified as significant and unavoidable, CDCR may still approve the project if it believes that social, economic, or other benefits outweigh the unavoidable impacts. CDCR would then be required to state in writing the specific reasons for approving the project, based on information in the DEIR and other information in the record. In accordance with Section 15093 of the State CEQA Guidelines, the document containing such reasons is called a "statement of overriding considerations."

2.2 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES AND APPLICABLE PERMITS

CDCR is the lead agency with primary authority for approval of the project. Additional agencies (listed below) with potential permit authority over the project, or elements thereof, will have the opportunity to review this

document during the public and agency review period, and will use this information when considering the issuance of any permits required for the project.

Public agencies with known permits, other approvals, or jurisdiction by law over resources on the site include (but may not be limited to) the agencies listed below.

2.2.1 LEAD AGENCY

- CDCR: Overall project approval, including certification of the adequacy of this EIR

2.2.2 FEDERAL AGENCIES (POTENTIAL PERMITTING AUTHORITY)

- Federal Aviation Administration (evaluation of height obstructions for structures near an airport)
- U.S. Army Corps of Engineers (consideration of jurisdictional wetlands)
- U.S. Fish and Wildlife Service (sensitive species consideration)

2.2.3 STATE RESPONSIBLE AGENCIES

- CAL FIRE
- California Department of Fish and Game
- Central Coast Regional Water Quality Control Board
- State Water Resources Control Board
- California Department of Public Health
- California Department of Transportation, District 5
- California Department of Transportation, Division of Aeronautics
- California State Fire Marshall

2.2.4 LOCAL RESPONSIBLE AGENCIES

The following agencies will use this EIR for permitting decisions pertaining to this project:

- City of Paso Robles (related to water and sewer service and potential roadway improvements)
- San Luis Obispo County Air Pollution Control District (authority to construct)
- San Luis Obispo County Flood Control and Water Conservation District
- Santa Barbara County Sheriff's Department
- San Benito County Sheriff's Department
- San Luis Obispo County Sheriff's Department

In addition, the Counties of San Luis Obispo, Santa Barbara and San Benito will use this EIR as environmental documentation for their roles as they provide services in support of reentry.

2.3 SCOPE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

Pursuant to Section 15143 of the State CEQA Guidelines, a lead agency should limit the DEIR's discussion of environmental effects to specific issues where significant effects on the environment may occur. CDCR used a variety of information to determine which issue areas could result in significant impacts on the environment. This information included field surveys of the project site, review of project characteristics, review of comments during agency consultation, and review of comments received on the NOP and during a public scoping meeting.

An NOP was circulated to public agencies and the public on October 8, 2009, for a 30-day review period that concluded on November 6, 2009. The NOP notified the public that a DEIR was to be prepared for the project and

briefly described the elements of the project and the scope of the environmental analysis that would be presented in the DEIR. The NOP also requested that public agencies and members of the public provide their comments on the scope and content of the DEIR that was to be prepared. Two public scoping meetings were held on October 21, 2009. The NOP and comments received on the NOP are included in Appendix A. Review of the NOP and public scoping comments and preliminary analysis indicate that a full-scope EIR is required for the Master Reuse Plan. All issue areas outlined in Appendix G of the State CEQA Guidelines are addressed in this document.

2.4 PUBLIC REVIEW AND PARTICIPATION PROCESS

Consistent with the requirements of CEQA, effort has been made during the preparation of this DEIR to contact affected agencies, organizations, and individuals who may have an interest in the project. As described above, this effort included the circulation of the NOP on October 8, 2009, and two public scoping meetings in Paso Robles on October 21, 2009. Early consultation with relevant agencies, organizations, and individuals assisted in the preparation of this DEIR.

CDCR has filed a Notice of Completion with the State Clearinghouse of the Governor's Office of Planning and Research, indicating that this DEIR has been completed and is available for review and comment by the public. The public review period will last 45 days, beginning August 16, 2010, and ending September 29, 2010**.**

2.4.1 PUBLIC MEETING

Two public meetings on this DEIR will be held in the Council Chambers, City Hall, 1000 Spring Street, Paso Robles, CA 93446 on Monday, September 20, 2010, at 2 p.m. and 6 p.m.**,** during the review period, to receive oral and/or written comments on the document. A public Notice of Availability of the DEIR, which also includes the date, times, and specific location for the public meetings, has been published in The Tribune, Country News Press, Santa Barbara News Press, and Freelance newspapers.

2.4.2 WRITTEN COMMENTS

Comments on the DEIR may be made either in writing before the end of the comment period (September 29, 2010) or orally at the aforementioned public hearing. Written comments should be mailed or e-mailed to the address provided below. After the close of the public comment period, responses to the comments received on the DEIR will be prepared and published, and together with this DEIR will constitute the Final EIR.

Please mail, e-mail, or fax comments on the DEIR by the deadline to:

California Department of Corrections and Rehabilitation
Facilities Management Division
Environmental Planning Section
Attn: Jane Hershberger
9838 Old Placerville Road, Suite B
Sacramento, CA 95827
Jane.Hershberger@cdcr.ca.gov
Fax: (916) 255-3030

Copies of the DEIR can be reviewed at the locations listed below. Technical studies can be reviewed at the CDCR address.

California Department of Corrections and Rehabilitation
Facilities Management Division
Environmental Planning Section
9838 Old Placerville Road, Suite B

Sacramento, CA 95827
http://www.cdcr.ca.gov/Reports_Research/Environmental/index.html

City of Paso Robles Library
1000 Spring Street
Paso Robles, CA 93446

Paso Robles Community Development Department
1000 Spring Street
Paso Robles, CA 93446

San Luis Obispo County
Dept. of Building and Planning
976 Osos Street, Room 200
San Luis Obispo, CA 93408

Santa Barbara County Clerk-Recorder
Hall of Records
1100 Anacapa Street
Santa Barbara, CA 93101

San Benito County Clerk
County Courthouse
440 5th Street, Room 206
Hollister CA 95023-3843

2.5 ORGANIZATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

This DEIR is organized into chapters, as identified and briefly described below. Chapters are further divided into sections (e.g., Section 4.4, "Biological Resources").

Chapter 1, "Executive Summary": Chapter 1 summarizes the project description, alternatives, the significant environmental impacts that would result from the project, and the mitigation measures proposed to reduce or eliminate those impacts.

Chapter 2, "Introduction": Chapter 2 describes the purpose and organization of the DEIR, context, public review process, and terminology used in the DEIR.

Chapter 3, "Project Description": Chapter 3 describes project location, background, proposed actions by CDCR, project characteristics, and project objectives. This chapter also describes project construction.

Chapter 4, "Environmental Setting, Thresholds of Significance, Environmental Impacts, and Mitigation Measures": For each environmental issue, such as biological resources, this chapter describes the existing environmental setting, discusses the environmental impacts associated with project construction and operations, and identifies mitigation for significant impacts.

Chapter 5, "Cumulative Impacts": This chapter discusses cumulative impacts that would result from the proposed project in combination with impacts from reasonably foreseeable projects in the project area.

Chapter 6, "Other CEQA Sections": The potential for the project to foster economic or population growth, or to remove obstacles to growth, is evaluated in Chapter 6. Project-level and cumulative impacts that cannot be mitigated to a less-than-significant level are also documented in this chapter.

Chapter 7, "Alternatives": This chapter describes alternatives to the project, at a level consistent with CEQA requirements. The alternatives are not analyzed at the same level as the project, which is consistent with the provisions of State CEQA Guidelines Section 15126.6(d). Rather, they present options that might reduce or avoid environmental impacts while attaining some of the project's objectives, and are compared to the impacts of the project.

Chapter 8, "Organizations and Persons Consulted": This chapter identifies the organizations and persons that were consulted during the preparation of the DEIR.

Chapter 8, "Preparers of the Environmental Document": This chapter identifies the DEIR authors and people who provided analysis in support of the DEIR's conclusions.

Chapter 9, "References": This chapter sets forth a comprehensive listing of all sources of information used in the preparation of the DEIR.

Appendices: The appendices contain various technical reports, letters, and other documentation, summarized or otherwise used for preparation of the EIR.

2.6 TERMINOLOGY USED IN THE DRAFT ENVIRONMENTAL IMPACT REPORT

This DEIR includes the following terminology to denote the significance of environmental impacts of the project:

Less-than-Significant Impact: A less-than-significant impact is one that would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

Significant Impact: Section 21068 of the State CEQA Guidelines defines a significant impact as one that causes "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Feasible mitigation measures or alternatives to the project must be considered to reduce the magnitude of significant impacts to less-than-significant levels.

Potentially Significant Impact: A potentially significant impact is one that, if it were to occur, would be considered a significant impact as described above; however, the occurrence of the impact cannot be definitely determined. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

Significant and Unavoidable Impact: A significant and unavoidable impact is one that would result in a substantial adverse effect on the environment that cannot be feasibly mitigated to a less-than-significant level. A project with significant unavoidable impacts can still be approved, but CDCR would be required to prepare a statement of overriding considerations, pursuant to State CEQA Guidelines Section 15093, explaining the social, economic, or other benefits of the project that outweigh the significant environmental impacts.

Thresholds of Significance: Significance thresholds are criteria that define at what level impacts would be considered significant. A criterion is defined based on examples found in CEQA or the State CEQA Guidelines, scientific and factual data, the policy/regulatory environment of affected jurisdictions, and other factors.

2.7 TECHNICAL AND OTHER STUDIES CONSIDERED IN THIS DRAFT ENVIRONMENTAL IMPACT REPORT

Several studies or reports have been prepared in support of the analysis presented in this DEIR and are included in the appendices (on CD). In addition, the following studies and reports were prepared in connection with or are applicable to the project, and are available for review at the California Department of Corrections and Rehabilitation, Facility Planning, Construction, and Management, Facilities Management Division, Environmental Planning Section, 9838 Old Placerville Road, Suite B, Sacramento, CA 95827.

3 PROJECT DESCRIPTION

This chapter presents a detailed description of the proposed *Paso Robles Property Master Reuse Plan* (Master Reuse Plan) located at the former California Department of Corrections and Rehabilitation (CDCR) Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility. The Master Reuse Plan includes four components, and if approved, would result in the construction of new facilities and/or the renovation of existing facilities to house up to 1,630 adult inmates at the maximum operational capacity of the respective facilities. This chapter also describes the CDCR's objectives related to the project, proposed staffing, and the anticipated schedule for project construction.

3.1 PROJECT PURPOSE AND NEED

CDCR correctional facilities have been faced with severe inmate crowding conditions for several years. As of June 2010, the CDCR adult population reached a population of more than 165,000. The state's adult prison institutions have operated at almost double their intended capacity. The housing of the inmate population has exceeded the rated capacity of institutions and has affected the physical plant and operations to the extent that CDCR facilities are unable to operate efficiently. Because CDCR has insufficient celled and dormitory housing to accommodate the current and projected male populations, CDCR has activated "nontraditional" temporary housing by converting existing program areas (i.e., gymnasiums, dayrooms, and television rooms) to provide housing for the expanding population. In response to the severity of the prison crowding problem, Governor Arnold Schwarzenegger declared a state of emergency on October 4, 2006, that describes "conditions of extreme peril" that threaten "the health and safety of the men and women who work inside [severely overcrowded prisons] and the inmates housed in them."

In response to a projected deficiency in the number of male inmate beds in the statewide prison system, the California Legislature passed Assembly Bill (AB) 900, the Public Safety and Offender Rehabilitation Services Act of 2007 (the Act). Under the Act, several institutions, including the former DJJ facility, have been designated to receive additional beds through new housing construction. The Act authorizes CDCR to:

- design, construct, or renovate prison housing units, prison support buildings, and programming space to add up to 16,000 beds in several phases at CDCR facilities; and
- construct housing and treatment space for inmates in need of medical, dental, mental health, and substance abuse treatment services.

The Act also authorizes CDCR to establish county-based and/or regionally based reentry facilities throughout the state that will house a total of up to 16,000 inmates in several phases. CDCR has prepared a reentry bed plan to implement AB 900; the plan provides for 10,000 reentry beds. This legislation recognized the need to more effectively supervise offenders and provide expanded rehabilitative serves to inmates prior to their release. The Act requires CDCR to expand educational, vocational, and substance abuse treatment programs for incarcerated individuals prior to their parole. The Act also requires CDCR to develop a collaborative partnership with local governments, local law enforcement, and social service providers in the communities where reentry program facilities are built and operated because parolees are eventually returned to the county of their last legal residence.

Unprecedented overcrowding of California's prisons compromises the medical and mental health of inmates as well as the safety of inmates, prison staff, and the general public. At the request of the *Plata* Court (which oversees the prison system's medical care) and *Coleman* Court (which oversees the mental health care provided to California inmates), the Chief Judge of the U.S. Court of Appeals for the Ninth Circuit convened a three-judge court to consider the plaintiffs' request for a court-ordered reduction in the California prison population. The three-judge court recently concluded that CDCR shall provide the court with a population reduction plan that will

in no more than 2 years reduce the population of CDCR's adult institutions to 137.5% of their combined design capacity.

The former DJJ facility was closed in July 2008 in response to a substantial statewide decline in the number of youthful offenders (wards) sentenced to state facilities. The state population, once more than 10,000 wards, is now at approximately 1,400, which is a result of legislative actions that discouraged the use of State facilities. CDCR anticipates that this decline in the commitment of wards to State-operated juvenile detention facilities by counties will be a long-term trend. CDCR's remaining ward population will be housed at other DJJ facilities.

CDCR believes the former DJJ site represents a potentially unique opportunity to beneficially reuse existing State-owned correctional facilities to help reduce overcrowding in the State prison system and to provide an opportunity for CAL FIRE to enhance the former institution-based conservation camp to a full, stand-alone facility housing up to 130 Level I inmates that would be able to provide local and regional fire protection services. An institution-based camp is one that does not have onsite housing facilities for the Level I inmate crews; these camps depend on the daily transport of Level I inmates from the supporting correctional facility (such as the former DJJ facility) to serve on fire and maintenance crews. Stand-alone camps such as the one proposed for the Paso Robles site, provide more flexibility in scheduling work crews and would facilitate a much faster response during emergencies.

3.2 PROJECT OBJECTIVES

The following are the primary goals and objectives of the Paso Robles Master Reuse Plan:

- Implement the goals set forth in the Public Safety and Offender Rehabilitation Services Act of 2007 to increase male adult inmate prison capacity and associated support and program space to reduce overcrowding and improve living conditions for inmates. The reduction in prison overcrowding also improves security standards for staff, inmates, and the California communities;
- Utilize the existing facilities, infrastructure, and available State-owned land within the former DJJ facility in Paso Robles for conversion to a facility that can house adult Level II male inmates. The basic design of the existing buildings and dormitories within this former DJJ facility can be readily converted to house adult male inmates once additional perimeter security measures are implemented;
- Utilize other available land within the State-owned Paso Robles parcel for the construction of a secure reentry facility that would serve the County of San Luis Obispo and two adjacent counties. The goal of the reentry facility is to better prepare inmates for successful return to the county of their last legal residence and to reduce the potential for recidivism. The proposed reentry facility would provide housing and training areas to allow CDCR to achieve its goal of providing substantive work, academic education, vocational training, and specialized behavioral treatment of inmates prior to their scheduled parole;
- In the short-term, provide a means of reactivating a former CAL FIRE institutional-based conservation camp to support regional wildfire containment and protection of people, property, and resources potentially exposed to wild land fires. In the long-term, use available State-owned property within the Paso Robles parcel for the development of a permanent, full service, conservation camp with dormitories and related support buildings that can house a year-around crew of approximately 130 Level I inmates. These inmates would live within the camp instead of returning to a correctional facility each day;
- Provide an opportunity for the long-term enhancement and replacement of native habitat through the use of existing onsite land and inmate conservation crews;
- Provide new or renovated correctional and conservation camp facilities that meet or exceed current energy and building code standards including features that reduce energy and water consumption; and
- Provide an opportunity to regain or exceed previous employment levels on the Paso Robles parcel.

3.3 PROJECT LOCATION

The CDCR property consists of an approximately 160-acre parcel situated at 4545 Airport Road, Paso Robles, California. The entire parcel is owned by State of California. The parcel contains the former DJJ facility, which was closed in July 2008; the CAL FIRE Los Robles Conservation Camp, which was demobilized but still operated by CAL FIRE on a limited basis; and vacant land. The CDCR property is located in the north-central portion of San Luis Obispo County within the city limits of Paso Robles, but outside the city's urban core. The parcel is approximately 3 miles northeast of central Paso Robles and approximately 30 miles north of San Luis Obispo. Airport Road provides direct access to the parcel from State Route (SR) 46, an east-west–running state roadway that connects California's central coast in San Luis Obispo County on the west with the San Joaquin Valley on the east (see Exhibit 3-1). SR 46 provides regional access to the north-south running U.S. Highway 101 (U.S. 101) about 2 miles west of the facility, as well as access to the Central Valley to the east and California's central coast to the west.

The CDCR property is surrounded by land that has been historically utilized for agriculture and a regional airport, the Paso Robles Municipal Airport. Site grading for a future business park was recently completed directly south of the project site, across Dry Creek Road. The Paso Robles Municipal Airport is located directly east/northeast of the project site across Airport Road (Exhibit 4.8-2 in Section 4.8, "Land Use and Agricultural Resources"). The project area is generally recognized as an increasingly popular location for business park developments because of its close proximity to the airport and U.S. 101. See Exhibit 3-2 for the boundaries of the State-owned property, existing facilities, and location of proposed facilities within the subject parcel.

3.4 DESCRIPTION OF THE PROJECT SITE

The former DJJ facility opened in 1947 as the Paso Robles School for Boys. Over the next few years, the facility was expanded from the original capacity of 60 to 140 boys and a number of additions were made to the site to allow for increasing capacity. Buildings added to the site included four dormitories (1951); administration, culinary, shop, and power plant buildings (1952); additional classrooms and dormitory buildings (1953); and an auditorium (mid-1950s) (Paso Robles Journal 1954:3). More recent additions included a living center (1990) and an outpatient housing unit (2001). In 2004, six new classrooms and a new air conditioning system were constructed. The administrative building and chain link fence make up the outer perimeter of the former DJJ facility. As noted above, the facility closed and was deactivated in July 2008.

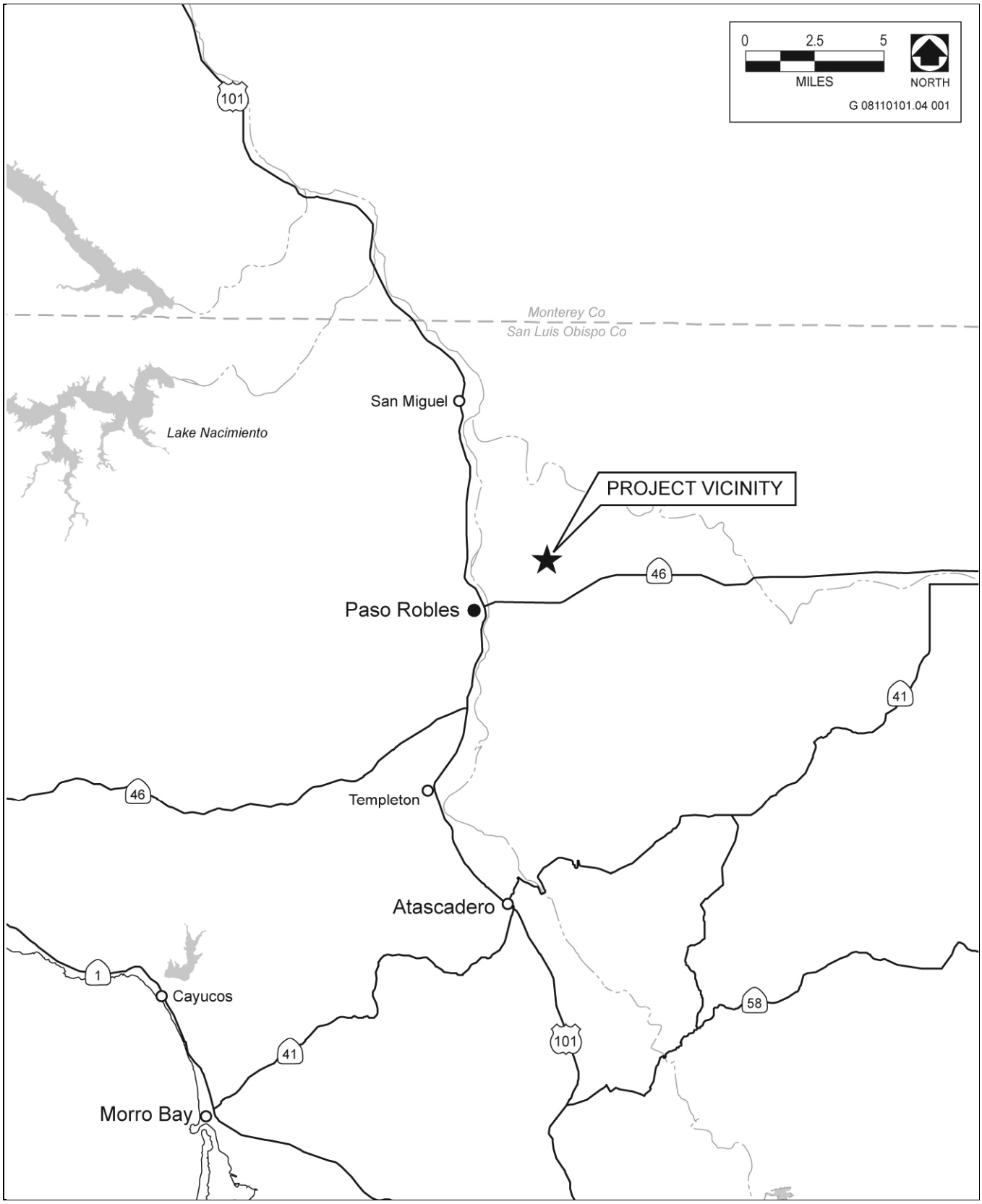
Buildings located outside of the existing secure perimeter of the former DJJ facility include residential housing for staff in the southwest corner of the site and the CAL FIRE conservation camp support facility on the northeastern portion of the site.

3.5 DESCRIPTION OF PROPOSED PROJECT

The Master Reuse Plan consists of four components. In total, up to 1,630 inmates would be housed at the site at full occupancy of the two correctional facilities and conservation camp:

1. **Estrella Adult Correctional Facility**. This proposed facility would reuse buildings and infrastructure of the former DJJ facility to house up to a maximum of 1,000 adult inmates. Approximately 900 of these inmates would be classified as medium security or Level II. No higher security-level inmates would be housed at the proposed Estrella Adult Correctional Facility (Estrella Facility). Some additional new construction would be necessary to provide a full adult facility with an upgraded secure perimeter.

   The balance of the inmates to be housed at the Estrella Facility (approximately 100) would be classified as minimum security or Level I. All CDCR correctional facilities utilize Level I minimum security inmate crews for maintenance and support activities. Level I inmates typically may work outside of the secure



Source: Created by AECOM in 2008

Regional Location **Exhibit 3-1**

Sources: Vanir 2009, CDCR 2009, adapted by AECOM in 2009

Site Vicinity **Exhibit 3-2**

perimeter; while Level II inmates also often perform maintenance and support services, these inmates would not be allowed outside the secure perimeter on work crews.

2. **Central Coast Regional Secure Community Reentry Facility.** CDCR proposes to construct and operate a 500-bed secure reentry facility on this property. The male inmates housed at this facility would be within 6-12 months of parole. The reentry facility would provide programs to assist in the successful transition of these inmates back into their county of last legal residence. The proposed Central Coast Reentry Facility would only serve inmates to be paroled to the counties of San Luis Obispo, Santa Barbara, and San Benito. CDCR reentry facilities are limited to a maximum of 500 inmates per Penal Code Section 6271(a).

3. **CAL FIRE Los Robles Conservation Camp Reactivation and Construction**. The existing CAL FIRE facility would be reactivated to provide wild land fire protection and maintenance services as a result of the implementation of the proposed Paso Robles Master Reuse Plan. Reactivation of the former institution-based DJJ camp would be achieved through the use of crews provided from the approximately 100 Level I minimum security inmates to be housed at the proposed adjacent Estrella Adult Correctional Facility. The master plan also identifies an area in and immediately adjacent to the existing CAL FIRE support complex for the future construction and operation of a permanent stand-alone 130-bed conservation camp. Once constructed CAL FIRE would no longer need to depend on the use of inmate crews from the Estrella Facility. The full stand-alone camp would require the addition of support facilities such as inmate and staff living quarters, food service, training rooms, visitation areas, and administrative buildings.

4. **Onsite Habitat Restoration Area.** Approximately 10–15 acres located in the southwestern portion of the CDCR property are proposed to be used as a habitat restoration area. This area would be restored to provide land for permanent tree replacement plantings for those trees removed from the CDCR property for the Master Reuse Plan and could provide other restored habitat onsite.

A detailed description of the four proposed elements of the Master Reuse Plan is provided below. The locations of proposed buildings and project components described are shown in Exhibits 3-2 through 3-4.

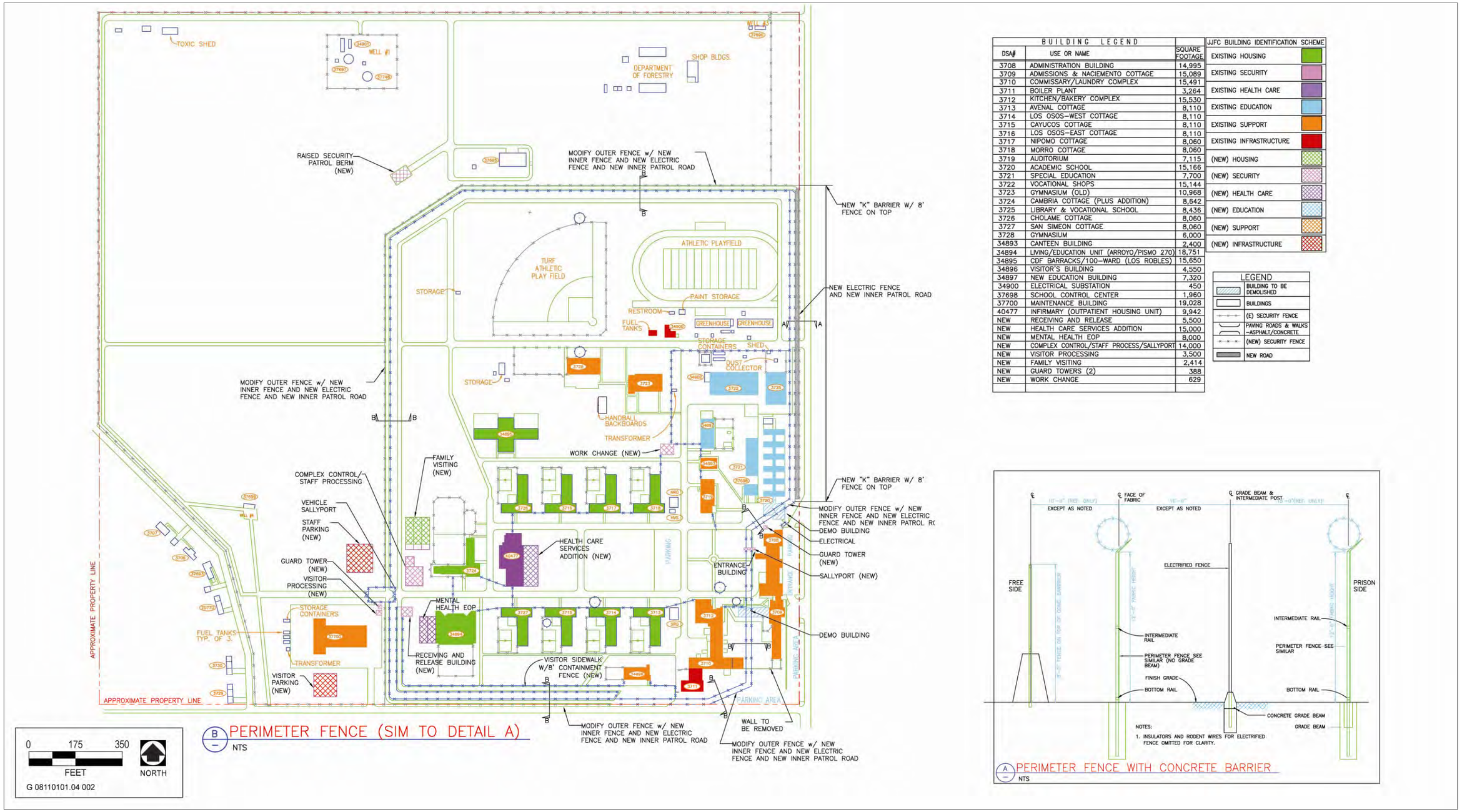
3.5.1 ESTRELLA ADULT CORRECTIONAL FACILITY

FACILITY DESCRIPTION

One component of the Master Reuse Plan is the proposed conversion of the now-closed DJJ facility to an adult, medium-security correctional facility (Exhibit 3-3). The existing housing units that served the DJJ operation (a combination of dormitories and two celled housing units) would provide appropriate living quarters for inmates classified as Level II based on existing CDCR security and housing protocols. While a substantial portion of the existing facility can be reused to house Level II inmates with only minimal modifications, the conversion to an adult correctional facility would require some physical changes to meet the security and operational needs of a facility for Level II inmates.

The Estrella Facility would primarily house Level II inmates. As noted above, however, a compliment of Level I inmates would be housed at the facility for maintenance and support services. Based on typical CDCR design standards, a facility for Level II inmates typically consists of open dormitories with a secure perimeter that includes armed coverage, perimeter security barriers, and outside patrol roads.

Estrella Enhanced Perimeter Security Measures. As shown in Exhibit 3-3, the proposed conversion to an adult male correctional facility would require substantive improvements to the existing DJJ perimeter security system. Historically CDCR's Juvenile Justice Division has employed a single-fence perimeter in light of the close restrictions imposed on juveniles' movement within a facility. The former Paso Robles DJJ facility is currently



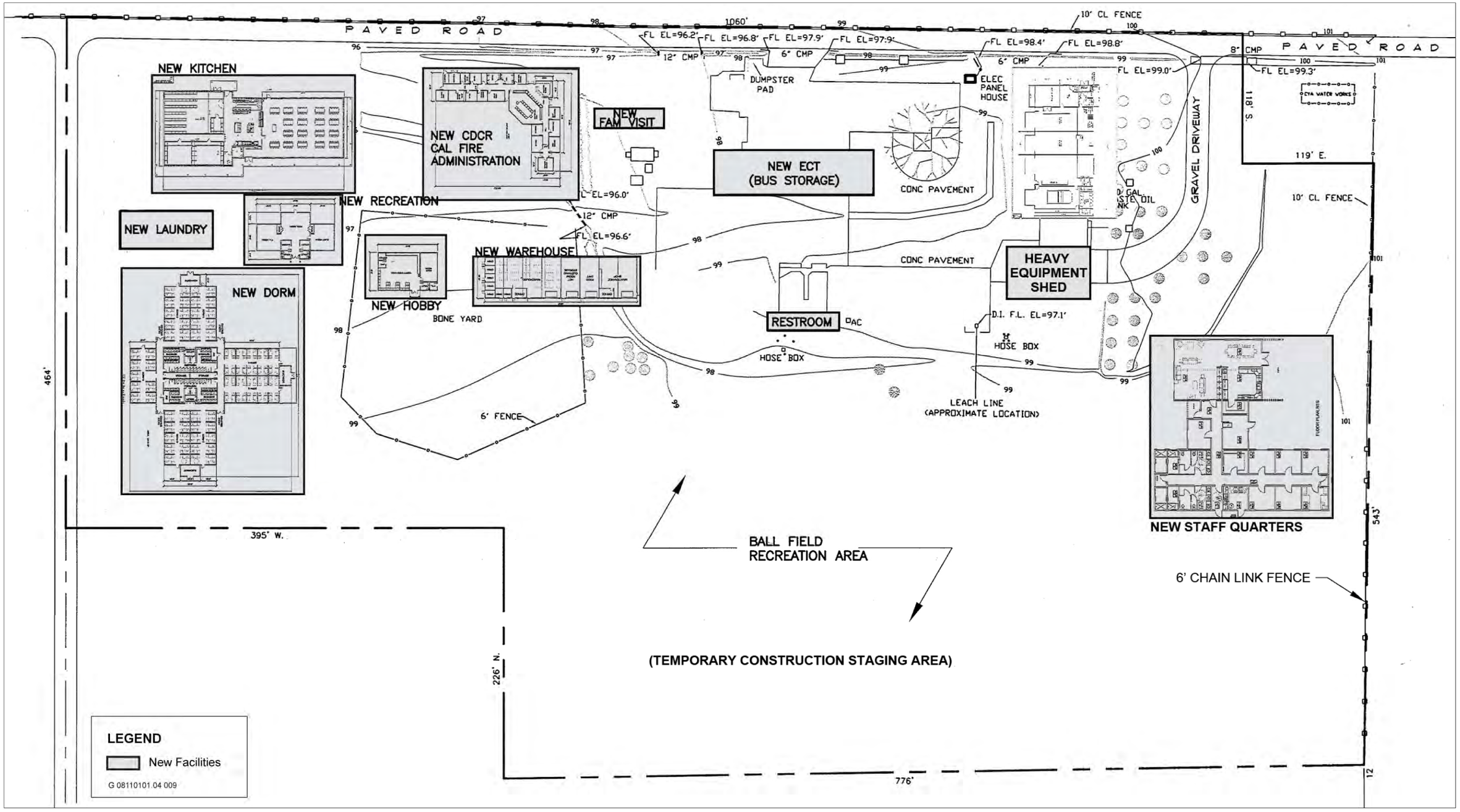
BUILDING LEGEND		
DSA#	USE OR NAME	SQUARE FOOTAGE
3708	ADMINISTRATION BUILDING	14,995
3709	ADMISSIONS & NACIEMENTO COTTAGE	15,089
3710	COMMISSARY/LAUNDRY COMPLEX	15,491
3711	BOILER PLANT	3,264
3712	KITCHEN/BAKERY COMPLEX	15,530
3713	AVENAL COTTAGE	8,110
3714	LOS OSOS–WEST COTTAGE	8,110
3715	CAYUCOS COTTAGE	8,110
3716	LOS OSOS–EAST COTTAGE	8,110
3717	NIPOMO COTTAGE	8,060
3718	MORRO COTTAGE	8,060
3719	AUDITORIUM	7,115
3720	ACADEMIC SCHOOL	15,166
3721	SPECIAL EDUCATION	7,700
3722	VOCATIONAL SHOPS	15,144
3723	GYMNASIUM (OLD)	10,968
3724	CAMBRIA COTTAGE (PLUS ADDITION)	8,642
3725	LIBRARY & VOCATIONAL SCHOOL	8,436
3726	CHOLAME COTTAGE	8,060
3727	SAN SIMEON COTTAGE	8,060
3728	GYMNASIUM	6,000
34893	CANTEEN BUILDING	2,400
34894	LIVING/EDUCATION UNIT (ARROYO/PISMO 270)	18,751
34895	CDF BARRACKS/100–WARD (LOS ROBLES)	15,650
34896	VISITOR'S BUILDING	4,550
34897	NEW EDUCATION BUILDING	7,320
34900	ELECTRICAL SUBSTATION	450
37698	SCHOOL CONTROL CENTER	1,960
37700	MAINTENANCE BUILDING	19,028
40477	INFIRMARY (OUTPATIENT HOUSING UNIT)	9,942
NEW	RECEIVING AND RELEASE	5,500
NEW	HEALTH CARE SERVICES ADDITION	15,000
NEW	MENTAL HEALTH EOP	8,000
NEW	COMPLEX CONTROL/STAFF PROCESS/SALLYPORT	14,000
NEW	VISITOR PROCESSING	3,500
NEW	FAMILY VISITING	2,414
NEW	GUARD TOWERS (2)	388
NEW	WORK CHANGE	629

JJFC BUILDING IDENTIFICATION SCHEME	
EXISTING HOUSING	
EXISTING SECURITY	
EXISTING HEALTH CARE	
EXISTING EDUCATION	
EXISTING SUPPORT	
EXISTING INFRASTRUCTURE	
(NEW) HOUSING	
(NEW) SECURITY	
(NEW) HEALTH CARE	
(NEW) EDUCATION	
(NEW) SUPPORT	
(NEW) INFRASTRUCTURE	

LEGEND	
	BUILDING TO BE DEMOLISHED
	BUILDINGS
	(E) SECURITY FENCE
	PAVING ROADS & WALKS –ASPHALT/CONCRETE
	(NEW) SECURITY FENCE
	NEW ROAD

Sources: Vanir 2009, CDCR 2010, adapted by AECOM in 2010

Proposed Estrella Facility Site Plan **Exhibit 3-3**



Sources: CAL FIRE 2009, adapted by AECOM in 2010

Conceptual Proposed CAL FIRE Conservation Camp (Full Buildout) **Exhibit 3-4**

bounded by a single 12-foot high outer perimeter security fence (similar fencing is also provided along a significant portion of the parcel's outer property line).

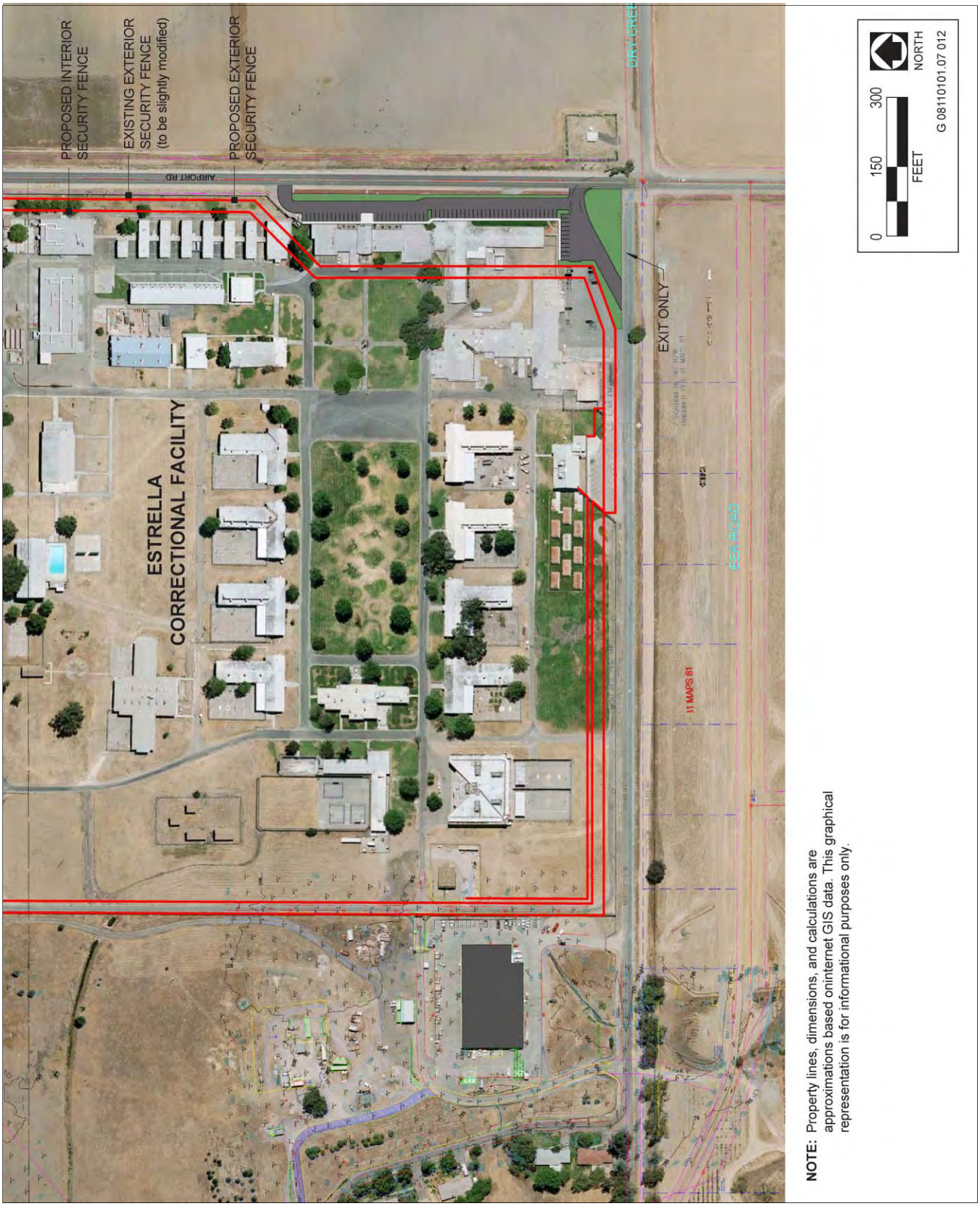
By contrast the CDCR design standards for adult correctional facilities require a double perimeter fencing system (e.g., two parallel 12-foot high fences). At the majority of CDCR adult facilities, these security improvements include the installation of a lethal electrified interior component between the two perimeter fences. Exhibit 3-3 includes a detail of the double fencing and lethal fence components that would be installed around the entire perimeter of the Estrella Facility. Because there is existing perimeter fencing around the former DJJ facility it will only be necessary to install one new interior fence along with the lethal fence component to meet CDCR adult security standards. Exhibit 3-3 indicates, for example, that most of the existing fencing on the northern, western, and southern sides will be used as the outer fencing component once it has been upgraded with new security elements (razor wire, etc.). However, along the eastern side facing Airport Road and in the southeastern corner of the former DJJ facility it will be necessary install two new perimeter fences to assure CDCR security standards are met. Near the northern end of the administration building the new perimeter fencing would turn and pass along the west side of the building. The new perimeter fencing would continue to the southeast corner of the property and turn west to allow a connection with the alignment of the existing roadway fencing along the western section of old Dry Creek Road. Exhibit 3-5 provides a more detailed schematic view of the alignment of the new perimeter fencing.

The new security perimeter would also include two new observation towers (at the site of the pedestrian and vehicular sally ports) that are approximately 35 feet tall, a continuous outer perimeter security road, and a security observation berm on the northwest corner of the perimeter fence. Installation of the new additional perimeter fencing would result in the removal of some existing landscaping along the alignment of the new fencing within the interior of the facility (especially along a portion of Airport Road and at the site of the security berm) and the removal/modification of certain existing structures. The majority of the new perimeter fencing would be placed in close proximity to (interior to) the existing fence. However, for the section of the facility perimeter where the existing administration building is located (southeast corner of Estrella site), a new perimeter fence (double fence) would pass along the interior (west) side of the building (no fencing is currently located to the interior of the administrative building). This section of the fencing would continue south to the existing employee parking lot located east of the existing visitor center. Because the administrative building would be located in front of the new perimeter fencing (when viewed from Airport Road), the administrative building would block views of the fencing and it would also provide an opportunity to improve the appearance of the front (east side) of this building.

New building construction would include a receiving and release building, staff processing building, an addition to the health care services building (mental health education and public outreach), family visiting, complex control, visitor processing building, and other incidental support buildings; see Exhibit 3-3. The project would also include renovations and improvements to the facilities water, sewer, electrical, infrastructure, etc.

Existing building upgrades would include: security hardware replacement, tile replacement, window repairs and replacement, plumbing, heating/cooling equipment, and electrical repairs and upgrades. Infrastructure improvements would include repair/replacement of the existing asphalt roads and sidewalks within the site to assure path of travel access compliance standards are met. The project would include improvements to the existing lighting structures, but would not include the installation of high-mast lights. Five new, 35-foot tall perimeter pole mounted lights are proposed along the eastern perimeter of the lethal electrified fence. The perimeter fencing would be a maximum height of approximately 12 feet with razor wire, and would be designed to minimize loss of wildlife through the use of standard CDCR designs and operations.

Along the section of fencing that currently parallels Airport Road to the north of administration building CDCR plans to retain the alignment of the existing DJJ perimeter fencing regardless of its plans to install two new perimeter fences (see the cross-section detail for this section of fencing in the lower right hand corner of Exhibit 3-3 and Exhibit 3-5). This third fence will be retained to provide a vehicular barrier to a narrow security driveway that would be situated immediately along the edge of the new perimeter fencing. Because the fencing closest to



Source: Vanir 2010.

Security Fence Detail **Exhibit 3-5**

the alignment of Airport Road would only serve to separate patrol traffic from on-coming traffic on this roadway , CDCR may consider installation of a low concrete wall at the base of this fence (section is approximately 1,200-feet long). CDCR has not made a decision on whether a concrete base or other similar protective measure (e.g., bollards, masonry wall) would be necessary for this section of property-line fencing. However, for purposes of this DEIR, a concrete base was assumed in the visual analysis.

Additional parking for staff (350 spaces) and visitors (35 spaces) would be provided in two new parking lots located to the west of the Estrella Facility near the existing warehouse. Some existing parking areas near the administrative building would be reduced by placement of the new perimeter fencing, realignment of inbound driveways, and enhanced landscaping. Approximately 50 spaces would remain in the parking lot on the east side of the Estrella Facility facing Airport Road. Where the DEIR analyzes two additional employee access options, CDCR would prepare to retain the use of the original alignment of the western section Old Dry Creek Road as the service entrance to the Estrella Facility because of its orientation to the existing warehouse and support buildings. This section of Dry Creek Road would also provide access to new visitor and employee parking lots that would be constructed on the west side of the Estrella Facility, and the improved vehicular sally port. This section of Dry Creek Road, which directly borders the southern edge of the Estrella Facility, has been used for access to the facility for many years. Access modifications would be made to the orientation of the existing driveways into the Airport Road parking lot to accommodate northbound left turning movements to the facility (see Exhibit 4.11-10).

To improve the appearance of the east side of the Estrella Facility, CDCR is considering the removal of the exterior security screens from the east side of the administration building, relocating most of the current employee and visitor parking to the west side of the site (near the warehouse), and enhancing the area available for landscaping along the Airport Road frontage.

With regards to wastewater treatment services, CDCR proposes the continued use of the City’s sewage collection and treatment facilities for the Estrella Facility. Use of this system would likely require some potential modification to the collection line currently on the CDCR property, the installation of a screen to remove oversized materials prior to discharge off the property, and a new flow meter; CDCR is also considering measures to eliminate or substantially reduce infiltration into the collection system during periods of high rainfall. CDCR will negotiate with the City on the final number of units of additional treatment capacity that would be necessary to meet projected wastewater flows from the facility; the negotiated flows would be in addition to the existing wastewater rights that have been secured through the original agreement between CDCR and the City (i.e., 490 beds). There is a potential that the City’s adjacent sewage lift station would need to be modified for either one or both of the new correctional facilities. CDCR would secure additional treatment capacity through payment of the approved connection fees established by the City of Paso Robles.

With regard to water service, while the former DJJ facility used on-site wells and a small treatment plant to supply potable water to the facility, CDCR proposes to use city-supplied water to meet potable water demands. However, the existing well system may be used on a limited basis for onsite irrigation (non-potable uses). Connection to city water would require CDCR to secure water rights through the city or directly with San Luis Obispo County Flood Control and Water Conservation District. CDCR would negotiate with City to determine the incremental cost of treatment and distribution of the water to the Estrella Facility (and the other two proposed facilities).

Conversion of the former DJJ to an adult correctional facility would require the removal of some interior trees either because of their advanced state of decline (especially aging non-native trees) or to accommodate security measures. In addition to the limited number of trees that would be removed along Airport Road to provide room for the new perimeter fence, CDCR would remove some oaks and other native trees from the interior where there are conflicts with security sight lines. However, CDCR is committed to retaining many existing trees, including native oaks, which are currently within the Estrella perimeter where these trees would not conflict with security protocols. A few existing trees (native and non-native) would be removed along the northern fence line to enhance security sight lines. The project includes a significant commitment to replacement of all trees lost as a result of the project (see Section 4.2, Biological Resources).

Onsite drainage would only be slightly modified as a result of the proposed project. CDCR proposes to remove hardscape (e.g., asphalt) in areas where it is not needed for operational purposes (e.g., portions of the existing parking lot along Airport Road). Further, CDCR intends to limit the area of new hardscape to minimize the developed/paved areas of the property.

Fire and emergency services would continue to be provided by the City of Paso Robles and/or its emergency services contractors. CDCR would enter into agreements to reimburse the City for such services. Because the Estrella Facility would be brought up to current building and public safety codes, sufficient water storage would be provided, and a full-time safety coordinator would be available. CDCR does not expect the project would substantially increase demands for existing city fire resources. Given the nature of the inmate population to be housed at Estrella, which would exclude inmates with acute medical needs, the project is not anticipated to disproportionately burden the emergency services resources of fire department.

Visitation to the Estrella Facility would be permitted on Saturdays and Sundays, 8:30 a.m. to 3:30 p.m. Visitors would be processed at the new Visitor Processing Center and then would walk via a secure (fenced) walkway from the Visitor Processing Center to the Visiting Building Entrance after processing is complete. The estimated number of visitors per day for the Estrella Facility is 40 to 50.

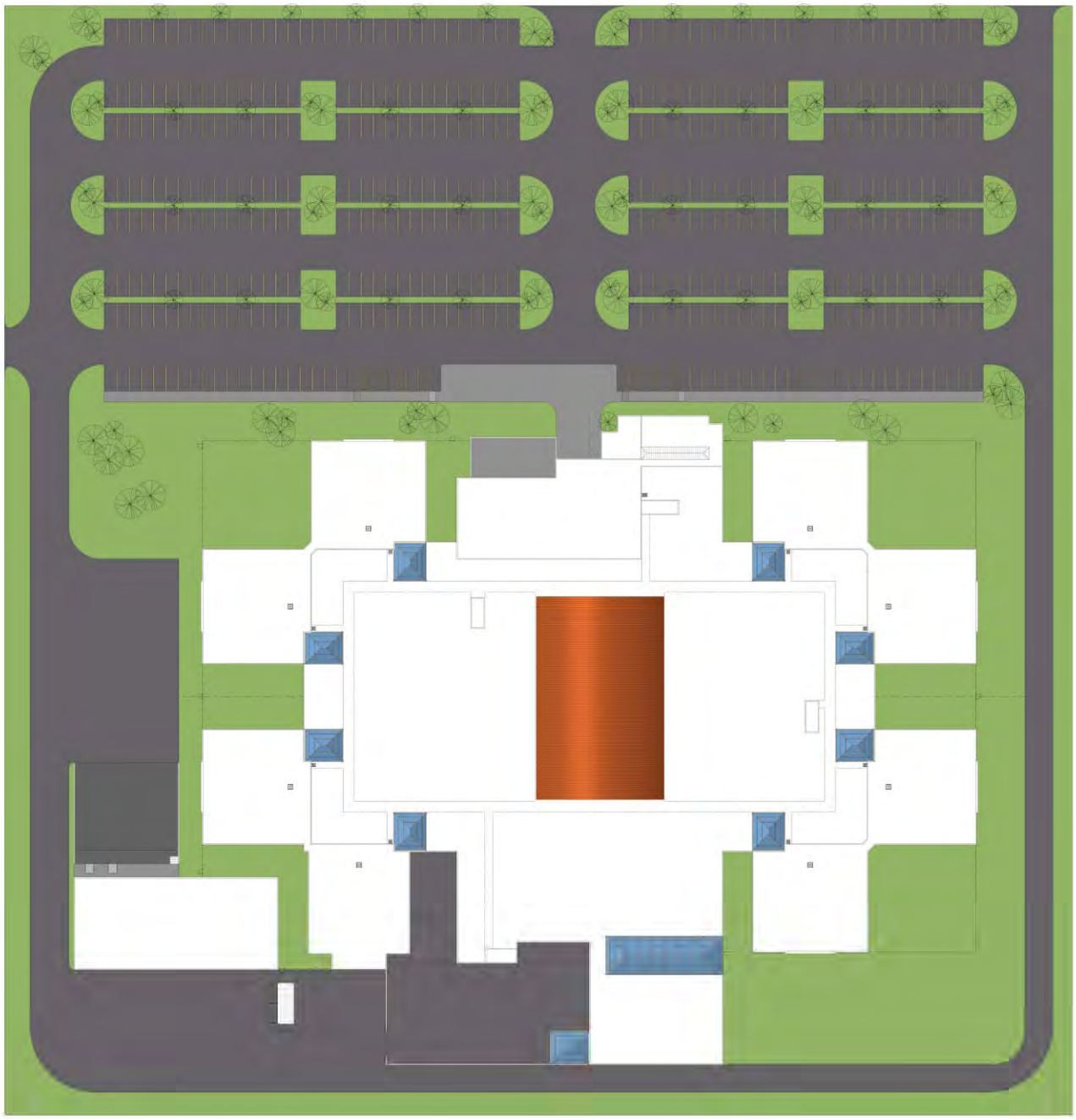
As noted in the introduction to this chapter the operational capacity of the Estrella Facility would be set at a maximum of 1,000 inmates by CDCR. Within this limit, CDCR plans to house approximately 900 Level II inmates at this facility after all modifications are completed. Within the four-tier CDCR inmate classification system, Level II is considered the lower range for medium security inmates. The Estrella Facility would also have available housing for approximately 100 Level I minimum security inmates that are needed for maintenance and support services within the prison and its surrounding grounds. These inmates would be accounted for within the 1,000 total inmates housed at the Estrella Facility. CDCR is committed to making a portion of these minimum security inmates available to serve CAL FIRE and its operations on an interim basis until their proposed stand-alone 130-bed conservation camp is completed. CAL FIRE and CDCR would be responsible for supervision and transport of any inmate work crews working outside the grounds of the facility.

A total of 1,000 beds (Levels I and II as described above) would be the maximum housing capacity of this facility based on the spatial characteristics of the existing housing units. CDCR intends to use the Estrella Facility to house older adult Level II inmates, many of whom may have many years remaining on their sentences. Older inmates would benefit from the existing one-story, open dormitories because of the absence of substantial barriers to access and path of travel. Further, the existing health care services building and proposed expansion would be valuable in providing typical outpatient services that would be necessary for this aging inmate population. Medical outpatient services would be the responsibility of the court-ordered Medical Receiver, who coordinates with the CDCR prison system to ensure appropriate inmate medical care. A portion of the Level II beds will be designated to partially meet the compliance plans for the Coleman Case.

Inmates selected to be housed at the proposed Estrella Facility would be screened to avoid individuals who have advanced or acute medical needs. Consolidated medical care facilities are being planned in other locations of California for inmates with these higher medical needs.

3.5.2 CENTRAL COAST REGIONAL SECURE COMMUNITY REENTRY FACILITY

CDCR proposes to construct a secure community reentry facility (SCRF) on vacant state-owned land immediately west/northwest of the perimeter of the former juvenile facility. See Exhibit 3-2 for the proposed location of the reentry facility, Exhibit 3-6 for the proposed layout of the facility, and 3-7 for the proposed conceptual design renderings of the facility. The Counties of San Luis Obispo, San Benito, and Santa Barbara have committed to cooperating on the program planning of the reentry facility, which would serve the anticipated number of inmates annually paroled to these three respective counties. Such cooperation is memorialized in a written memorandum of understanding (MOU) with the City of Paso Robles (City), dated December 8, 2008, wherein each county



PARKING REQUIREMENTS:

PARKING SPACES REQUIRED:	425	PARKING SPACES
PARKING SPACES PROVIDED:	9	ACCESSIBLE PARKING SPACES
	449	STANDARD PARKING SPACES
TOTAL PARKING SPACES PROVIDED:	458	PARKING SPACES

0 60 120
FEET
NORTH
G 08110101.04 031

Source: Created by CDCR in 2010

Proposed Reentry Facility Site Plan **Exhibit 3-6**

Concept Style A

Concept Style B

Reentry Facility Design Concepts **Exhibit 3-7**

agreed to support the proposed siting of the reentry facility, while also agreeing to coordinate transportation and community services for parolees released into each county's respective jurisdiction (see Appendix B).

The reentry facility would operate independently from the adult correctional facility. While similar, the proposed reentry facility is not functionally related to the planned conversion of the existing facility to an adult correctional facility. If approved, construction of this facility would be implemented on a separate schedule than the Estrella Facility.

The reentry facility would be designed to house a maximum of 500 inmates pursuant to Penal Code Section 6271(a). The objective of this program is to provide a secure facility that can house qualified adult male inmates during their last approximately 12 months of their respective sentences before parole. The facility would provide space for special programs whose goal is to better prepare inmates for return to the county of their last legal residence. (Under current policies, inmates are already released to the County of their last legal residence.)

Inmates would be involved in work and rehabilitation programs and activities within the reentry facility. Inmate work assignments may include clerks, porters, yard crews, culinary, and maintenance. Rehabilitative programs and activities include vocational and academic education, substance abuse, cognitive-behavioral programs, employment readiness, recreation, library services and community, volunteer, and faith-based services. The program schedule would include inmate work assignments, academic and vocational education, substance abuse programs, and other offender programs, with all activities located inside the reentry facility. Rehabilitative programs would be offered based on assessed inmate risk and need factors.

AB 900 mandates inmate participation in rehabilitative programs such as academic and vocational education and expanded substance abuse services. Inmates identified as low risk to reoffend would receive other appropriate services and support, such as training in life skills, a library, recreation, and employment readiness preparation, to meet their needs and promote successful reentry.

An approximate 460-space parking lot would be provided on the northern border of the reentry site. Parking lot lighting and exterior building wall packs (5 foot-candles per square foot) are proposed. No high-mast lighting is proposed at the reentry facility. Visitation for the reentry facility would be permitted 7 days per week between 8 a.m. and 9 p.m. Visitation on weekdays would be by appointment only. Visitors would be processed in the Visitor Processing Center (within the SCRF) and then walk via a secure (fenced) walkway from the Visitor Processing Center to the Visiting Building Entrance after processing is complete. The estimated number of visitors per day for the reentry facility is 30 on weekdays and 150 on weekends.

The proposed SCRF would be operated by CDCR. The facility would not function as a "halfway house" with a work release program; it would be a secure correctional facility where inmates would be housed 24 hours a day for the final approximately 12 months of their respective sentences. The facility would be designed to meet all CDCR standards for public safety. Operation of an SCRF at the Paso Robles site would not change the state's obligation to return paroled inmates to the county of their last legal residence.

At the request of the City, all parties to the proposed SCRF have signed an MOU for the Central Coast SCRF (see Appendix B). The MOU addresses a range of operational concerns expressed by the City, including coordination of transport of inmates upon release from the SCRF to ensure that they depart to their last legal residence, the modes of transportation, the responsibility for providing community services for parolees, and the City's expectations for the environmental review process for the Master Reuse Plan and individual projects on the State-owned property.

Development of the site for the proposed reentry facility (northwest corner of parcel) would require some onsite grading to provide a uniform elevation for the facility. The grading plan would emphasize a balanced cut and fill to the degree feasible. A few trees, mostly non-native, would need to be removed from the site. All onsite drainage would be directed to an onsite retention basin just south of the facility. Access to the reentry facility would require modification (e.g., widening, paving) of the northern driveway to the CDCR property). The

driveway's intersection with Airport Road would be modified to provide a turn lane and sight-line improvements. As with the Estrella Facility, the construction of the proposed reentry facility would require securing additional wastewater capacity from the city's treatment plant and potential modifications to the onsite collection system. CDCR would pay the applicable connection fee for this capacity. With regard to water service, it is assumed that similar water agreements would be negotiated with the City as was described for the Estrella Facility above.

3.5.3 CAL FIRE LOS ROBLES CONSERVATION CAMP (INTERIM AND PERMANENT)

CAL FIRE conservation camps are operated jointly by CDCR and CAL FIRE. This EIR addresses two phases of the proposed CAL FIRE conservation camp. The first would be the interim reactivation of the institution-based CAL FIRE conservation camp using 100 Level I inmates housed at the proposed Estrella Facility. The second would be the planned construction of a full stand-alone conservation camp with an inmate dormitory and related support buildings not currently available at the existing CAL FIRE facility (Exhibit 3-4). As noted, an institution-based camp as a facility that cooperatively operates out of a correctional institution, whereby CDCR houses and feeds the inmates. At this type of conservation camp the inmates are processed each day out of and back into the respective prison through a security processing station that allows screening for contraband, weapons, and other prohibit materials. The CAL FIRE responsibility is to provide appropriate space to train and support the inmates as they are dispatched to daily work assignments. By contrast, a permanent stand-alone conservation camp is a facility that can provide facilities independent of a prison to meet all the needs of the inmate crews including housing, food service, equipment storage, and training.

The proposed Master Reuse Plan assumes that CAL FIRE would be able to reactivate the Los Robles camp using Level I inmates housed at the Estrella Facility once it is operational. The Level I inmates would return to Estrella at the end of each work day or work period. Once capital outlay funding is available CAL FIRE anticipates the construction of a full stand-alone conservation camp in and among its existing build complex on the northeastern corner of the Paso Robles parcel. The capacity of this facility would be 130 Level I inmates. Funding for this full conservation camp would not be under the authority of AB 900.

The proposed Master Reuse Plan includes the designation and commitment by CDCR of an area within the state-owned land for a permanent site that would be large enough for a stand-alone CAL FIRE conservation camp (see Exhibit 3-4). CDCR would provide correctional officers to oversee security of the inmates while CAL FIRE staff would supervise inmate work crews. The area designated for the camp would be capable of supporting all the facilities needed for an approximately 130-bed inmate facility. The area planned as a permanent CAL FIRE conservation camp is associated with the area already devoted to CAL FIRE support buildings in the northeastern corner of the parcel (Exhibit 3-2).

Initially, reactivation of the CAL FIRE facility would provide an opportunity for CAL FIRE to provide five Level I inmate crews. An inmate work crew is typically made up of 17 to 20 members. CDCR anticipates coordinating with CAL FIRE in an effort to maximize the number of Estrella Level I inmates that can be made available each day for fire response and conservation projects in the Central Coast region. While the conservation camp operation was demobilized with the closure of the DJJ facility, CAL FIRE believes it can provide sufficient staffing to support these crews until the full stand-alone conservation camp is available. With construction of the full stand-alone conservation camp, CAL FIRE would be able to provide 6 inmate work crews. No new facilities would be needed by CAL FIRE to use Level I inmates on an interim basis (institution-based camp). CDCR has not determined if Level I inmate crews can be housed within the Estrella Facility during its conversion to an adult correctional facility. The former DJJ complex will undergo significant renovation so it will have to be subsequently determined if it is feasible to use one or more of the dormitories on an interim basis during the facility's construction phase.

A total of approximately 30 parking spaces associated with the full stand-alone CAL FIRE Camp component (12 for CAL FIRE staff, six for CDCR staff, and 10 for CAL FIRE/CDCR business guests) are proposed. If Level I inmate crews can be housed within the Estrella Facility during its conversion to an adult correctional facility, visitors of Level I inmates would be processed at the Estrella Facility. When the permanent CAL FIRE

conservation camp is completed, visitors for inmates housed at the stand-alone conservation camp would be processed at the CAL FIRE facility. It is estimated that the facility would receive two to five visitors per day.

Construction of the full conservation camp would result in minor modifications to onsite drainage. The driveway improvements described above for the reentry facility would also benefit the CAL FIRE facility. The existing section of perimeter security fencing parallel to Airport Road between the northeast corner of the Estrella secure perimeter and the existing CAL FIRE driveway would be replaced with an approximately six-foot high property line fence (see Section 4.1, Visual Resources); additional landscaping may be provided along this aspect of the CAL FIRE area.

3.5.4 ON-SITE HABITAT RESTORATION AND CREATION AREA

A fourth component of the Master Reuse Plan would be the enhancement of the southwestern corner of the 160-acre parcel for permanent habitat restoration and creation. This is the triangular area just west of the existing employee housing on the site (Exhibit 3-2). If determined to be suitable, a portion of this area would be used for planting of valley oaks and other representative habitat affected by the project such as the loss of some mature oak trees at other areas of the site. Other opportunities for habitat creation also exist, and can be used to offset other habitat impacts in the region.

3.5.5 PARKING AND SERVICE ROADS

The Master Reuse Plan would remove and/or relocate a number of existing parking spaces. Parking for the Master Reuse Plan would be provided as follows:

- **Estrella Facility:** Approximately 50 spaces in the existing eastern parking lot, 35 spaces in the new western visitor parking lot, and 350 spaces in the new western staff parking lot
- **Reentry Facility:** 460 spaces in the northern area of the reentry site
- **CAL FIRE Facility:** 30 spaces within the interior of the complex

The locations of proposed parking spaces and service roads are shown in Exhibits 3-3 and 3-4.

3.5.6 UTILITIES AND SERVICE SYSTEMS

Following is a general discussion of the proposed utilities systems. More detail is provided in Section 4.12, “Utilities and Service Systems.”

STORMWATER DRAINAGE

The CDCR property does not currently drain into City drainage facilities. The Master Reuse Plan includes a retention basin (see Exhibit 3-2) that will be sized to City standards. Offsite drainage improvements would include the relocation of the existing culverts and some regrading of the roadside ditches adjacent to the northern access road and Airport Road. The project would not connect to City drainage facilities. While CDCR is committed to removing any unneeded paving or similar impermeable coverage, especially within the Estrella complex, it is anticipated that implementation of the Master Reuse Plan would result in a net increase of onsite impervious surfaces. Approximately 14.5 acres of new pavement and buildings would be constructed. As a State agency, CDCR would comply with all federal and state requirements pertaining to the prevention of contaminants entering stormwater and on-site erosion during construction. These requirements include securing appropriate regulatory approvals from the State Water Resources Control Board (SWRCB) and Central Coast Regional Water Quality Control Board (RWQCB) to obtain a SWRCB statewide National Pollutant Discharge Elimination

System (NPDES) stormwater permit for general construction activity (SWRCB Order 2009-0009-DWQ), and any other necessary site-specific waste discharge requirements (WDRs) or waivers under the Porter-Cologne Act.

CDCR would prepare a notice of intent (NOI) and storm water pollution prevention plan (SWPPP) for pollution prevention and control. Erosion would be controlled onsite through the implementation of a variety of best management practices (BMPs), which would be incorporated into the SWPPP. The BMPs would be based on the criteria and practices outlined in the California Department of Transportation (Caltrans) S*tormwater Quality Handbook*, the Caltrans construction-site BMPs manual (Caltrans 2000), and the *California Stormwater Quality Association Construction BMP Handbook* (CASQA 2003). BMPs that could be implemented are listed below. Final BMPs selected will be based on site-specific conditions.

- Schedule construction activities to minimize the length of time disturbed soils are exposed to erosive processes.
- Preserve, to the maximum extent practicable, on-site vegetation.
- Install hydraulic mulch, straw mulch, and wood mulch in areas where soil is exposed.
- Use geotextiles, plastic covers, and erosion control blankets/mats in areas that contain exposed soils and that are stored in stockpiles, flat, sloped, or contain channels.
- Install a graveled area or pad located at points where vehicles enter and leave a construction site.
- Install temporary or permanent graded surfaces, diversion dikes or berms, or stormwater conveyances (swales, channels, gutters, drains, sewers) to redirect sheet flows.
- Install temporary silt fences as a sediment barrier to reduce the velocity of sheet flows.
- Place gravel bags as a berm or barrier to reduce the velocity of sheet flows.
- Construct temporary detention structures to facilitate the removal of sediment from waters.
- Install storm drain inlet protection devices to detain or filter sediment-laden runoff before discharge.
- Provide covered storage for materials, especially toxic or hazardous materials, to prevent exposure to stormwater.
- Ensure that spills and releases of materials are cleaned up immediately and thoroughly. Ensure that appropriate spill response equipment (e.g., spill kits preloaded with absorbents) is provided in convenient locations throughout the construction site. Spent absorbent material must be managed and disposed of in accordance with applicable regulations.
- Provide sufficient conveniently located trash and scrap receptacles to promote proper disposal of solid wastes.
- Establish specific concrete washout facilities where excess concrete should be disposed.
- Perform regular street cleaning at entrance/exit points to the construction site.
- Clean vehicles and equipment that regularly enter and leave the construction site.
- Fuel vehicles and equipment off-site whenever possible. If off-site fueling is not practical, establish a designated on-site fueling area with proper containment and spill cleanup materials.

- Use offsite maintenance facilities whenever possible.

WATER

Potable water is currently provided to the site by two primary on-site wells (one additional well is abandoned and another serves as backup), a chlorination system, and storage tanks. As described above, CDCR intends to secure water from the city and may use existing onsite wells for non-potable irrigation. City water supplies would be delivered to the CDCR property through an existing water line in Airport Road.

WASTEWATER

The City of Paso Robles currently provides wastewater service to the CDCR property. As described above, CDCR intends to secure additional wastewater conveyance and treatment capacity from the City above and beyond its existing negotiated agreements. The CDCR property is currently served by an 8-inch sewer line transecting the site from northeast to southwest. CDCR proposes to continue to use this 8-inch line; however, as an alternative, one or more facilities may connect to an 18-inch sewer line planned for Airport Road. This 18-inch sewer line, in combination with a 24-inch line that the City would construct in Dry Creek Road, would divert wastewater flows from the airport area away from the 8-inch sewer line on the project site. Wastewater from the project site is currently conveyed to Lift Station 12, which would receive project wastewater flows. CDCR would install a screen or grinder along the pipeline before connection to Lift Station 12.

ELECTRICAL AND GAS

CDCR staff have indicated that on-site electrical facilities are old and, in many cases, faulty. Although specific plans to upgrade on-site facilities are currently not available, the proposed project would likely include several upgrades to onsite electrical facilities (i.e. transformers, switches, etc.). Upgrades to offsite Southern California Gas facilities would not be required.

3.6 PROJECT STAFFING AND CONSTRUCTION

3.6.1 PROJECT COST AND STAFFING

There are currently nine staff positions at the former DJJ and CAL FIRE facilities. Based on CDCR's staffing ratios for custody staff, approximately 998 new staff would be required for the Level II, CAL FIRE, and reentry facilities, bringing the total staff at the project site to 1,007. Of these 1,007 staff, 605 would be required for the Estrella Facility, 365 for the reentry facility, and 37 for the CAL FIRE facility. No staff would be required for the on-site habitat restoration area. The proposed facilities would operate 24 hours a day year-round, with three 8-hour shifts (watches) and an overlapping administrative shift. New employees would include correctional officers, administrative staff, and other types of support staff. Table 3-1 identifies current and projected prison employment levels by project component and shift.

3.6.2 CONSTRUCTION

Construction of the three components of the Master Reuse Plan is expected to begin January 2011 and would be completed in approximately 28 months. The Master Reuse Plan is planned to be fully operational by summer 2013. The following provides the construction schedule for each component:

- The Estrella Facility construction is anticipated to begin in mid-2011 and be completed by the end of 2012.
- Both phases of the CAL FIRE component are anticipated to begin in early 2011 and end by early 2013.
- The reentry facility construction is anticipated to begin in early 2011 and end in mid-2013.
- The onsite habitat restoration area component would be anticipated to begin in late 2012 and end by early 2013.

Table 3-1 Estimated Staffing for Paso Robles Property Master Reuse Plan				
Work Shift	Time	Existing	Projected New Staff	
			Weekday	Weekend
First Watch	**10:00 p.m.–6:00 a.m.**			
Estrella Facility		–	35	34
CAL FIRE		–	6	2
Reentry		–	16	16
Subtotal		**–**	***57***	***52***
Second Watch	**6:00 a.m.–2:00 p.m.**			
Estrella Facility		4	323	81
CAL FIRE		5	10	2
Reentry		–	216	45
Subtotal		***9***	***549***	***128***
Third Watch	**2:00 p.m.–10:00 p.m.**			
Estrella Facility		–	71	57
CAL FIRE		–	10	2
Reentry		–	37	35
Subtotal		**–**	***118***	***94***
Total Staff		**9**	**724**	**274**
Grand Total New Staff (Total staff minus existing staff)			**998**	
Source: CDCR, April 19, 2010				

Security protocols, tool controls, and access requirements would be established and implemented to frame the operations of construction activities. During construction, the estimated peak level of construction workers on-site at any given time would be 375 (a maximum of 200 workers for the Estrella Facility component, 50 workers for the CAL FIRE Conservation Camp component, and 125 workers for the reentry facility component). Construction workers for the on-site habitat area are included within the above construction personnel estimates. Construction shifts would generally be between 6 a.m. and 4 p.m., Monday through Friday. Noise-generating construction activities would occur between 7 a.m. and 7 p.m., but would likely end by 4 p.m. consistent with construction hours of operations, Monday through Friday.

Earth-moving equipment, including graders, scrapers, backhoes, jackhammers, front-end loaders, generators, water trucks, and dump trucks, would be used during excavation for utilities and building foundations. Concrete trucks and pumpers would be onsite during concrete pours for foundations and slabs; forklifts would be used during erection of walls and delivery of materials from storage yards; and cranes would be operated for installation of precast panels, structural steel framing members, and metal decking. Fill required to grade the site and construct the building pads and berm for the observation post would be obtained onsite.

A construction staging area for the Estrella Facility would be located just to the west and south of an existing drainage that runs east to west through the western portion of the project site (Exhibit 3-2). The construction staging areas proposed for the CAL FIRE project component are illustrated in Exhibit 3-4 and the proposed

construction staging area for the proposed reentry facility is located east of the reentry facility footprint (Exhibit 3-2). The staging areas would be used for construction vehicle, equipment, and materials storage. A small amount of fuels, lubricants, and solvents may be stored in this area. Parking for construction workers would be provided in the existing visitor parking lots.

3.7 AB 900 COMMUNITY MITIGATION FUNDS

AB 900 authorizes CDCR to provide a one-time payment of $800.00 per design-bed capacity to address community and school issues. This funding is authorized by Section 15:19.403 of the Act.

Upon the initiation of construction of the Estrella Facility, CDCR would make available a total of $800,000 per Penal Code 7005.5. Half of these funds, $400,000, would be distributed to the San Luis Obispo County Superintendant of Schools. The superintendent would be responsible for the distribution of these funds to individual schools in the District.

The remaining balance of funds would be distributed once resolutions are adopted by the affected cities and the county to the division of the funds. For the reentry facility a total of $400,000 would be available for distribution to the superintendent of schools and cities and county as described above.

Construction of the CAL FIRE facility would not be funded from the authority of AB 900 so no community mitigation funds would be distributed for that project.

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4 ENVIRONMENTAL SETTING, THRESHOLDS OF SIGNIFICANCE, ENVIRONMENTAL IMPACTS, AND MITIGATION MEASURES

Chapter 4 of the DEIR contains a discussion of existing conditions, thresholds above which an impact is considered significant, the significance of environmental impacts, measures to mitigate significant impacts to the degree feasible, and the level of significance after mitigation. Issues evaluated in these sections consist of the full range of potential environmental topics originally identified for review in the notice of preparation (NOP) of the DEIR. Appendix A contains a copy of the NOP and comments received on the NOP. Each section in this chapter (Sections 4.1 through 4.13) of this DEIR is organized into the following major components:

- **Existing Conditions:** This subsection presents the existing regional and local environmental conditions relevant to the consideration of project impacts, as described below. The applicable regulatory framework, plans, and policies under which the proposed project would be implemented are also discussed in the environmental setting component of each section.

- **Thresholds of Significance:** This subsection presents the criteria used to determine the level at which environmental impacts would be significant. The criteria are expressed as thresholds above which the project would have a significant effect on the environment. Thresholds may be quantitative or qualitative, and may be based on agency standards, or legislative or regulatory requirements as related to the impact analysis.

- **Environmental Impacts of the Project:** This subsection discusses potential significant effects of the proposed project on the environment, based on whether they exceed expressed thresholds. Project impacts are numbered sequentially throughout each topical section (e.g., air quality, traffic, and biological resources). For instance, impacts in Section 4.3 are numbered Impact 4.3-a, Impact 4.3-b, Impact 4.3-c, and so on. A bold impact title precedes the discussion of each impact. The discussion that follows the impact number and title includes information to support the stated conclusion. An italicized summary of the impact and statement of its level of significance (presented in bold italic) are provided at the end of each impact.

- **Mitigation Measures:** This subsection provides mitigation measures to reduce significant or potentially significant effects of the proposed project to the extent feasible. The State CEQA guidelines (Section 15370) defines mitigation as:

  a. avoiding the impact altogether by not taking a certain action or parts of an action;

  b. minimizing impacts by limiting the degree of magnitude of the action and its implementation;

  c. rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

  d. reducing or eliminating the impact over time by preservation and maintenance operation during the life of the action; and

  e. compensating for the impacts by replacing or providing substitute resources or environments.

  The mitigation measures are registered numerically, corresponding to the impact being addressed. For example, Impact 4.3-b would be mitigated with Mitigation Measure 4.3-b.

- **Level of Significance after Mitigation:** This subsection describes the status of all significant impacts following application of mitigation measures. Either the impact would be reduced to a level below the significance threshold (mitigated to a less-than-significant level) or it would be concluded that feasible mitigation is not available or is insufficient to reduce an impact to less than significant. This would be a "significant unavoidable effect on the environment."

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4.1 AIR QUALITY

This section includes a description of existing air quality, a summary of applicable regulations, and analyses of potential short-term and long-term air quality impacts of the proposed project. The methods of analysis for short-term construction, long-term regional (operational), local mobile source, odor, and toxic air contaminant (TAC) emissions are consistent with the guidelines of the City of Paso Robles and the San Luis Obispo Air Pollution Control District (SLOAPCD). Mitigation measures are recommended, as necessary, to reduce significant air quality impacts.

4.1.1 EXISTING CONDITIONS

The site proposed for Paso Robles Property Master Reuse Plan (Master Reuse Plan) implementation is located on state-owned land in the city of Paso Robles, San Luis Obispo (SLO) County. Paso Robles is located approximately 90 miles west of Bakersfield and approximately 120 miles north of the city of Ventura. The state property is bounded by Dry Creek Road (old) to the south and Airport Road to the east. U.S. Highway 101 (U.S. 101) is located 2.5 miles to the west and provides regional access to the area. Local access to the CDCR property is provided by State Route (SR) 46 and Airport Road. SLO County is one of three counties in the South Central Coast Air Basin. The other two counties are Santa Barbara County and Ventura County (both located south of SLO County). SLOAPCD has local jurisdiction over air quality in SLO County.

The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

TOPOGRAPHY

SLO County constitutes a land area of approximately 3,316 square miles with varied topography and climate. It is bordered by Monterey County to the north, Santa Barbara County to the south, and Kern County to the east, with the Pacific Ocean as the western border. From a geographical and meteorological standpoint, SLO County can be divided into three general regions: the coastal plateau, the Upper Salinas River Valley, and the East County Plain. Air quality in each of these regions is characteristically different, although the physical features that divide them provide only limited barriers to transport of pollutants between regions (SLOAPCD 2001:2-1).

Coastal Plateau

About 75% of the county population and a corresponding portion of the commercial and industrial facilities are located within the coastal plateau. Therefore, air pollutants per unit area are generally higher here than in the other regions. The coastal plateau is about 5–10 miles wide and varies in elevation from sea level to about 500 feet. It is bounded on the northeast by the Santa Lucia Mountain Range, which extends almost the entire length of the county. Rising sharply to about 3,000 feet at its northern boundary, the Santa Lucia Range gradually winds southward away from the coast, finally merging into a mass of rugged features on the north side of Cuyama Canyon. Point Buchon juts into the Pacific Ocean just south of Morro Bay to form the protective harbor of SLO Bay. The Irish Hills are the dominant feature on this knob of land, rising abruptly from the shore to form steep cliffs and generally complex terrain from the Los Osos/Montana de Oro State Park area to Pismo Beach. These headlands have a pronounced influence on local windflow patterns. Winds on the lee side of the point often flow perpendicular to the prevailing winds and funnel back and forth through Price Canyon and the U.S. 101 corridor. This effect is markedly reduced south of Grover Beach (SLOAPCD 2001:2-1).

Upper Salinas River Valley

The Upper Salinas River Valley, located in the northern one-third of the county, composes 25% of the county's population. Historically, this region has experienced the highest ozone and particulate levels in the county. Transport of ozone precursors from the coastal plateau and from the San Joaquin Valley may contribute to this condition. This area of plains and low rolling hills is bounded on the west by the Santa Lucia Range and to the east by the Cholame Hills, a northern extension of the Temblor Range. Southward, the La Panza Range gradually rises east of Santa Margarita and runs roughly parallel to the coast, merging with the Caliente Range near the southern border of the county. Caliente Mountain, the highest peak in the county at 5,104 feet, is found in this range (SLOAPCD 2001:2-2).

East County Plain

The East County Plain is the largest region by land area, but only 1% of the county population resides here. Dryland farming and unpaved roads in this region contribute to county totals for particulate emissions, but these emissions rarely affect other regions of the county. A significant portion of this area is a landlocked drainage basin called the Carrizo Plain, which lies between the La Panza and Caliente Ranges on the west and the Temblor Range to the east. These mountains join together to close the basin at the southeastern tip of the county. The Diablo Range occupies the extreme northeastern portion of this region and, like the Temblors, lies adjacent to the San Joaquin Valley (SLOAPCD 2001:2-2).

METEOROLOGY AND CLIMATE

The climate of SLO County can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit (°F) near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001:2-4).

Regional meteorology is largely dominated by a persistent high-pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001:2-4).

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90% of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16–28 inches, while the Upper Salinas River Valley generally receives about 12–20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001:2-4).

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak

drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001:2-5).

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a sloshing effect. Under these conditions, pollutants may accumulate over the ocean for a period of 1 or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, trapping pollutants near the surface (SLOAPCD 2001:2-5).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a Santa Ana condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the post–Santa Ana condition lead to high ambient pollutant levels, but this condition does play an important role in the air pollution meteorology of the county (SLOAPCD 2001:2-5).

The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange, or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions (SLOAPCD 2001:2-5).

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition, termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating (SLOAPCD 2001:2-5).

Several types of inversions are common to this area. Weak surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low-lying areas this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses (SLOAPCD 2001:2-5).

During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating (SLOAPCD 2001:2-5).

In contrast, the presence of the Pacific High in the summertime can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1,000 to 2,500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in SLO County. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for 1 or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001:2-6).

Local Microclimate

Annual average high temperatures at the Paso Robles monitoring station range from 93°F in July to 60°F in January. Low temperatures range from 32°F in January to 50°F in July. Annual precipitation is approximately 15 inches, which occurs mostly between November and April (WRCC 2010a). The annual predominant wind direction and mean speed is from the northwest at 6.8 miles per hour (mph) (WRCC 2010b, 2010c).

SENSITIVE LAND USES

Sensitive land uses or sensitive receptors are people or facilities that generally house people (e.g., schools, hospitals, residences) that may experience adverse effects from unhealthful concentrations of air pollutants. The nearest sensitive land uses are six residences located immediately west of the CDCR property approximately 750 feet from the proposed CAL FIRE Conservation Camp. During construction of the Estrella Adult Correction Facility, no inmates would be housed at the CDCR property. However, inmates may be housed onsite during buildout of CAL FIRE conservation camp and reentry facility and would be considered sensitive receptors.

EXISTING AMBIENT AIR QUALITY—CRITERIA AIR POLLUTANTS

Concentrations of several air pollutants—ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}), and fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead—are used as indicators of ambient air quality conditions. Because these are the most prevalent air pollutants known to be deleterious to human health, and because there is extensive documentation available on health-effects criteria for these pollutants, they are commonly referred to as criteria air pollutants.

A brief description of each criteria air pollutant, including source types, health effects, and future trends, is provided below along with the most current attainment area designations and monitoring data for the project area and vicinity.

Ozone

Ozone is a photochemical oxidant, a substance whose oxygen combines chemically with another substance in the presence of sunlight. Ozone is the primary component of smog. Ozone is not directly emitted into the air, but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_X) in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X are a group of gaseous compounds of nitrogen and oxygen that results from the combustion of fuels. A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_X levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional scale, ozone is a regional pollutant.

Ozone located in the upper atmosphere (stratosphere) acts in a beneficial manner by shielding the earth from harmful ultraviolet radiation that is emitted by the sun. However, ozone located in the lower atmosphere (troposphere) is a major health and environmental concern. Meteorology and terrain play a major role in ozone formation. Generally, low wind speeds or stagnant air coupled with warm temperatures and clear skies provide the optimum conditions for ozone formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. In general, ozone concentrations over or near urban and rural areas reflect an interplay of emissions of ozone precursors, transport, meteorology, and atmospheric chemistry (Godish 2004).

The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthmatics and children, but healthy adults as well. Exposure to ambient levels of ozone ranging from 0.10 to 0.40 part per million (ppm) for 1–2 hours has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing tidal volumes (the amount of air inhaled and exhaled), and impairing respiratory mechanics. Ambient levels of ozone above 0.12 ppm are linked to symptomatic responses that include such symptoms as throat dryness, chest tightness, headache, and nausea. In addition to the above adverse health effects, evidence also exists relating ozone exposure to an increase in permeability of respiratory epithelia; such increased permeability leads to an increased response of the respiratory system to challenges, and a decrease in the immune system's ability to defend against infection (Godish 2004).

Carbon Monoxide

CO is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56% of all CO emissions nationwide. Other nonroad engines and vehicles (such as construction equipment and boats) contribute about 22% of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85% to 95% of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are sources of CO indoors. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air (EPA 2010a).

CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases (EPA 2010a).

The highest concentrations are generally associated with cold, stagnant weather conditions that occur during the winter. In contrast to problems caused by ozone, which tends to be a regional pollutant, CO problems tend to be localized.

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2 (EPA 2010a). The combined emissions of NO and NO_2 are referred to as NO_X and reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with ozone, the NO_2 concentration in a particular geographical area may not be representative of the local NO_X emission sources.

Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4–12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat. Severe, symptomatic NO_2 intoxication after acute exposure has been linked on occasion with prolonged respiratory impairment with such symptoms as chronic bronchitis and decreased lung functions (EPA 2010a).

Sulfur Dioxide

SO_2 is produced by such stationary sources as coal and oil combustion, steel mills, refineries, and pulp and paper mills. The major adverse health effects associated with SO_2 exposure pertain to the upper respiratory tract. SO_2 is a respiratory irritant with constriction of the bronchioles occurring with inhalation of SO_2 at 5 ppm or more. On contact with the moist mucous membranes, SO_2 produces sulfurous acid, which is a direct irritant. Concentration rather than duration of the exposure is an important determinant of respiratory effects. Exposure to high SO_2 concentrations may result in edema of the lungs or glottis and respiratory paralysis.

Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM_{10}. PM_{10} consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by condensation and/or transformation of SO_2 and ROG (EPA 2010a). Fine particulate matter ($PM_{2.5}$) is a subgroup of PM_{10}, consisting of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less (ARB 2008a).

The adverse health effects associated with PM_{10} depend on the specific composition of the particulate matter. For example, health effects may be associated with metals, polycyclic aromatic hydrocarbons, and other toxic substances adsorbed onto fine particulate matter (e.g., the piggybacking effect), or with fine dust particles of silica or asbestos. Generally, adverse health effects associated with PM_{10} may result from both short-term and long-term exposure to elevated concentrations and may include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death (EPA 2010a). $PM_{2.5}$ poses an increased health risk because the particles can deposit deep in the lungs and may contain substances that are particularly harmful to human health.

Lead

Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, as discussed in detail below, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. Environmental Protection Agency (EPA) set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. EPA banned the use of leaded gasoline in highway vehicles in December 1995 (EPA 2010a).

As a result of EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector have declined dramatically (95% between 1980 and 1999), and levels of lead in the air decreased by 94% between 1980 and 1999. Transportation sources, primarily airplanes, now contribute only 13% of lead emissions. A National Health and Nutrition Examination Survey reported a 78% decrease in the levels of lead in people's blood between 1976 and 1991. This dramatic decline can be attributed to the move from leaded to unleaded gasoline (EPA 2010a).

The decrease in lead emissions and ambient lead concentrations over the past 25 years is California's most dramatic success story with regard to air quality management. The rapid decrease in lead concentrations can be attributed primarily to phasing out the lead in gasoline. This phase-out began during the 1970s, and subsequent California Air Resources Board (ARB) regulations have virtually eliminated all lead from gasoline now sold in California. All areas of the state are currently designated as attainment for the state lead standard (EPA does not designate areas for the national lead standard). Although the ambient lead standards are no longer violated, lead

emissions from stationary sources still pose “hot spot” problems in some areas. As a result, ARB identified lead as a TAC.

Monitoring Station Data and Attainment Area Designations

Criteria air pollutant concentrations are measured at several monitoring stations in SLO County. The closest station to the CDCR property is the Atascadero–Lewis Avenue station located in the city of Atascadero, approximately 11 miles south of the CDCR property. The Atascadero–Lewis Avenue station does not measure CO. In general, the ambient air quality measurements from the Atascadero–Lewis Avenue station are representative of the air quality in the region of the CDCR property. Table 4.1-1 summarizes the air quality data from this station for the most recent 3 years, 2007–2009.

Table 4.1-1
Summary of Atascadero–Lewis Avenue Station Annual Ambient Air Quality Data (2007–2009)

	2007	2008	2009
Ozone			
Maximum concentration (1-hr/8-hr, ppm) (California[1])	0.79/0.072	0.87/0.080	0.78/0.068
Number of days state standard exceeded (1-hr/8-hr)	0/1	0/3	0/0
Number of days national standard exceeded (1-hr/8-hr)	0/0	0/1	0/0
Nitrogen Dioxide (NO_2)			
Maximum concentration (1-hour, ppm)	.046	.052	.045
Annual average concentration (ppm)	0.009	0.008	0.007
Number of days state 1-hour standard exceeded	0	0	0
Fine Particulate Matter ($PM_{2.5}$)			
Maximum concentration ($\mu g/m^2$) (California[1])	27.6	28.5	26.9
Number of days national standard exceeded (Measured/Estimated[2])	0/0	0/0	2/2
California annual average ($\mu g/m^2$)[1]	8.0	–	–
Respirable Particulate Matter (PM_{10})[2]			
Maximum concentration ($\mu g/m^2$) (California[1])	49.0	43.6	36.0
Number of days state standard exceeded (Measured/Estimated[2])	0/–	0/0	0/0
Number of days national standard exceeded (Measured/Estimated[2])	0/–	0/0	0/0

Notes: $\mu g/m^3$ = micrograms per cubic meter; – = data not available; ppm = parts per million

[1] California and national statistics may differ for the following reasons: California statistics are based on California approved samplers, whereas national statistics are based on samplers using national reference or equivalent methods. State and national statistics may therefore be based on different samplers. California statistics are based on local conditions National statistics are based on standard conditions. California criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

[2] Measured days are those days that an actual measurement was greater than the level of the California daily standard or the national daily standard. Measurements are typically collected every 6 days. Estimated days are the mathematically derived number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Source: ARB 2010a

Both ARB and EPA use this type of monitoring data to designate areas according to attainment status for criteria air pollutants established by the agencies. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. The "unclassified" designation is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the nonattainment designation, called "nonattainment-transitional." This designation is given to nonattainment areas that are progressing and nearing attainment. The most current attainment designations for SLO County are shown in Table 4.1-2 for each criteria air pollutant. SLO County currently meets the national standards for all criteria pollutants except for ozone and meets state standards for all criteria pollutants except ozone and PM_{10}.

Existing Emissions

With respect to SLO County, mobile sources are the largest contributor to the estimated annual average air pollutant levels of ROG, CO, and NO_X accounting for approximately 53%, 71%, and 92%, respectively, of the total emissions. Areawide sources account for approximately 90% and 75% of PM_{10} and $PM_{2.5}$ emissions, respectively. Stationary sources account for approximately 45% of emissions of oxides of sulfur (SO_X) (ARB 2009b).

EXISTING AIR QUALITY—TOXIC AIR CONTAMINANTS

Stationary- and Mobile-Source Emissions

Concentrations of TACs, or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient-air-quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

According to the *California Almanac of Emissions and Air Quality* (ARB 2009a), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being PM from diesel-fueled engines (DPM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other TACs, no ambient monitoring data are available for DPM because no routine measurement method currently exists. However, ARB has made preliminary concentration estimates based on a PM exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, *para*-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. DPM poses the greatest health risk among these 10 TACs (ARB 2009a).

According to ARB Community Health Air Pollution Information System and information provided by SLOAPCD, there are no major existing stationary sources of TACs within 3 miles of the CDCR property (ARB 2010b). Please refer to Exhibit 4.1-1 for the location of the nearest TAC sources.

Table 4.1-2
Ambient Air Quality Standards and Designations for San Luis Obispo County

Pollutant	Averaging Time	California		National Standards [1]	
		Standards [2, 3]	Attainment Status [4]	Primary [3]	Attainment Status [6]
Ozone	1-hour	0.09 ppm (180 μg/m^3)	N	–	U/A
	8-hour	0.070 ppm (137 μg/m^3)		0.075 ppm (147 μg/m^3)	
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	U
	8-hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	
	8-hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	A	0.053 ppm (100 μg/m^3)	U
	1-hour	0.18 ppm (339 μg/m^3)		–	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	A	0.030 ppm (80 μg/m^3)	U
	24-hour	0.04 ppm (105 μg/m^3)		0.14 ppm (365 μg/m^3)	
	3-hour	–		0.5 ppm (1300 μg/m^3)[5]	
	1-hour	0.25 ppm (655 μg/m^3)		–	
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 μg/m^3	N	–	U/A
	24-hour	50 μg/m^3		150 μg/m^3	
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 μg/m^3	A	150 μg/m^3	U/A
	24-hour	–		35 μg/m^3	
Lead [7]	30-day Average	1.5 μg/m^3	A	–	–
	Calendar Quarter	–		1.5 μg/m^3	A
	Rolling 3-Month Avg	–		0.15 μg/m^3	
Sulfates	24-hour	25 μg/m^3	A	No National Standards	
Hydrogen Sulfide	1-hour	0.03 ppm (42 μg/m^3)	U		
Vinyl Chloride [7]	24-hour	0.01 ppm (26 μg/m^3)	U/A		

Table 4.1-2
Ambient Air Quality Standards and Designations for San Luis Obispo County

Pollutant	Averaging Time	California		National Standards [1]	
		Standards [2, 3]	Attainment Status [4]	Primary [3]	Attainment Status [6]
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient of 0.23 per kilometer —visibility of 10 mi or more	U		

Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million

[1] National standards (other than ozone, PM, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when 99% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. The $PM_{2.5}$ 24-hour standard is attained when 98 % of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.

[2] California standards for ozone, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, PM, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[3] Concentration expressed first in units in which it was promulgated [i.e., parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$)]. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

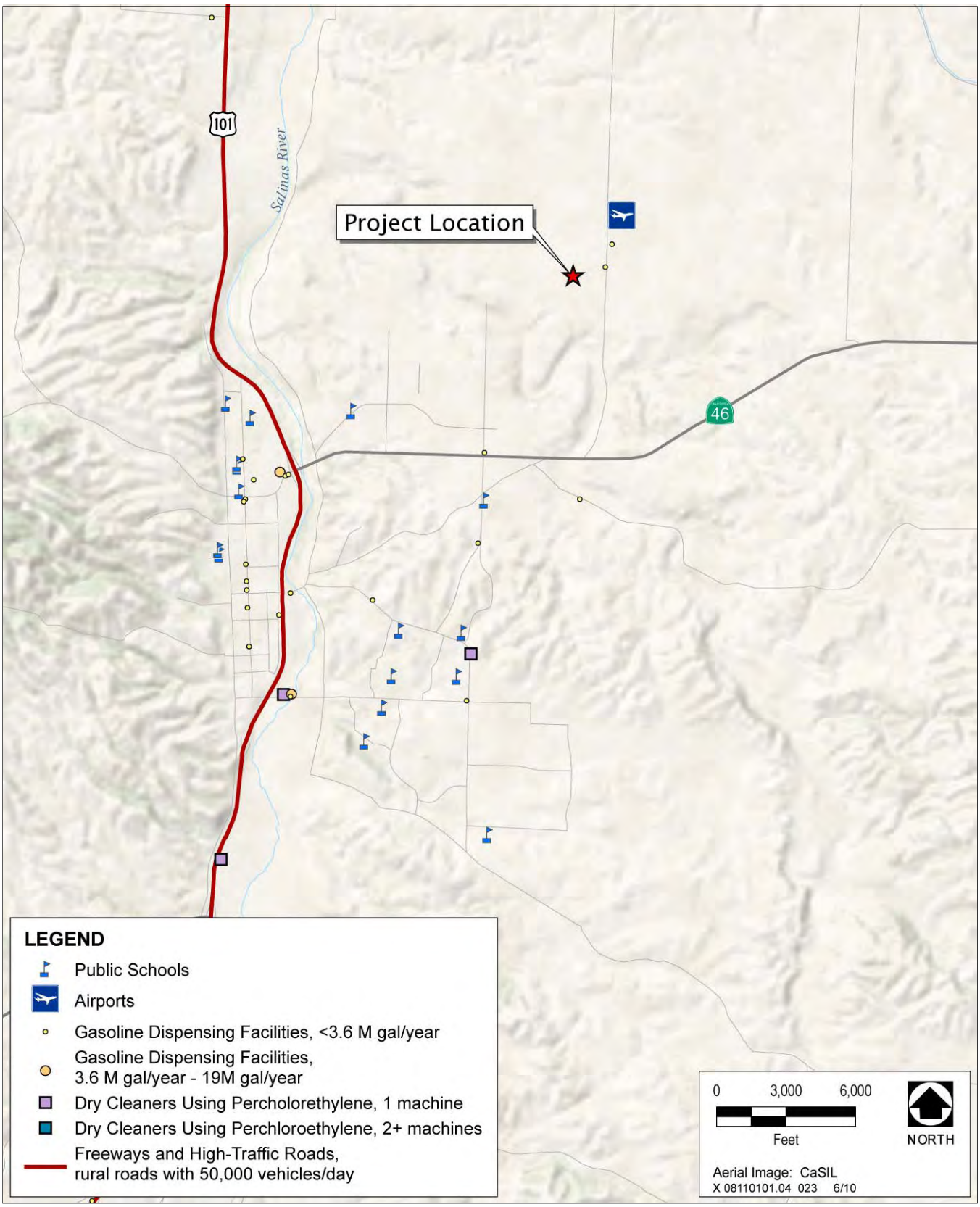
[4] Unclassified (U): a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
Attainment (A): a pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a 3-year period.
Nonattainment (N): a pollutant is designated nonattainment if there was a least one violation of a state standard for that pollutant in the area.
Nonattainment/Transitional (NT): is a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the standard for that pollutant.

[5] Secondary Standard

[6] Nonattainment (N): any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.
Attainment (A): any area that meets the national primary or secondary ambient air quality standard for the pollutant.
Unclassifiable (U): any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.
Maintenance (M): any area previously designated nonattainment pursuant to the CAAA of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under Section 175A of the CAA, as amended.

[7] ARB has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: SLOAPCD 2010b



Source: Data compiled by AECOM in 2010

Toxic Air Contaminants—Existing Stationary Sources Location Map **Exhibit 4.1-1**

EXISTING AIR QUALITY—ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast-food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

There are no existing concentrated sources of objectionable odors within 1 mile of the CDCR property (the surrounding area is primarily residential). No major agriculture-related odor sources (e.g., pig or dairy operations) are located within 2 miles.

EXISTING AIR QUALITY—GREENHOUSE GASES AND GLOBAL CLIMATE CHANGE

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) greenhouse gas (GHG) emissions sources across the globe, and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context for and a process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs, even relatively small (on a global basis) additions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and therefore significant.

This discussion presents the current state of climate change science, and GHG emissions sources in California; a summary of applicable regulations; and a description of project-generated GHG emissions and their contribution to global climate change.

Attributing Climate Change—The Physical Scientific Basis

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, Earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities (Intergovernmental Panel on Climate Change 2007).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 54% is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46% of human-caused CO_2 emissions remains stored in the atmosphere (Seinfeld and Pandis 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say, the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climate. From the standpoint of CEQA, GHG impacts related to global climate change are inherently cumulative.

Attributing Climate Change—Greenhouse Gas Emission Sources

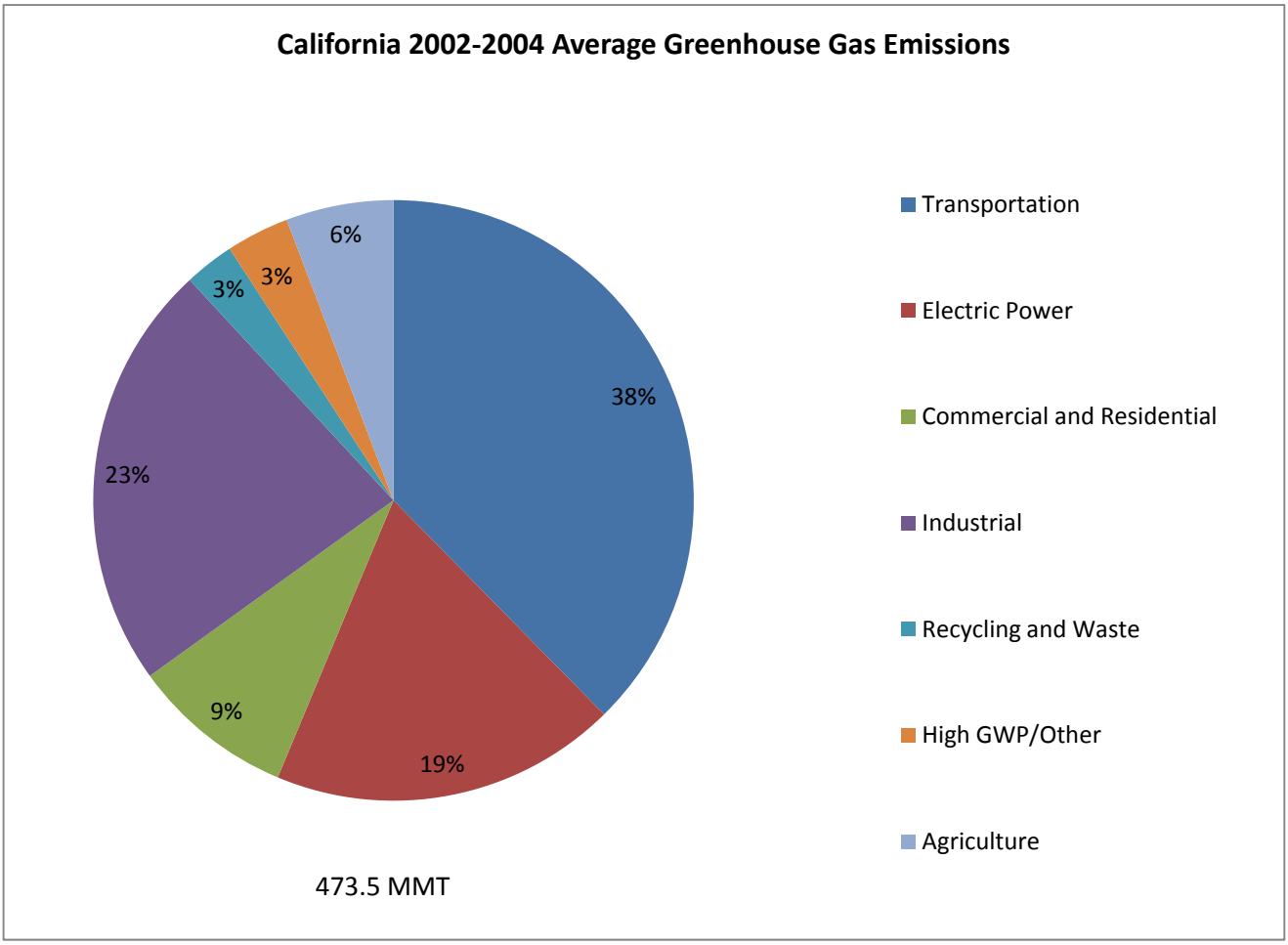
Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial and agricultural emissions sectors (ARB 2008). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (ARB 2008). Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, two of the most common processes of CO_2 sequestration.

State Greenhouse Gas Emissions Inventory

According to different ranking systems, California is the 12th to 16th largest emitter of CO_2 in the world (CEC 2006). California produced 484 million gross metric tons of CO_2 equivalent (CO_2e) in 2004 (ARB 2008). CO_2e is

a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix C, "Calculation References," of the General Reporting Protocol of the California Climate Action Registry (CCAR) (2009), 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2. Expressing emissions in CO_2e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 38% of total GHG emissions in the state (ARB 2007). This sector was followed by the electric power sector (including both in-state and out-of-state sources) (23%) and the industrial sector (20%) (ARB 2007). See Exhibit 4.1-2 below.



Source: ARB 2007

California's Greenhouse Gas Emissions by Economic Sector (2002–2004 Average) Exhibit 4.1-2

Local Inventory

SLO County has not conducted a GHG emissions inventory at the time of writing. However, SLOAPCD is beginning the plan preparation process for its climate change action plan, which will include preparation of a countywide GHG inventory (SLOAPCD 2010).

4.1.2 REGULATORY BACKGROUND

Air quality within the project area is regulated by EPA, ARB, SLOAPCD, and the City of Paso Robles. Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

CRITERIA AIR POLLUTANTS

Federal Plans, Policies, Regulations, and Laws

At the federal level, EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress were in 1990.

The CAA required EPA to establish National Ambient Air Quality Standards (NAAQS). As shown in Table 4.1-2, EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The primary standards protect the public health and the secondary standards protect public welfare. The CAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA must review all state SIPs to determine whether they conform to the mandates of the CAA and the amendments thereof, and to determine whether implementing them will achieve air quality goals. If EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) that imposes additional control measures may be prepared for the nonattainment area. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may cause sanctions to be applied to transportation funding and stationary air pollution sources in the air basin.

State Plans, Policies, Regulations, and Laws

ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required ARB to establish the California Ambient Air Quality Standards (CAAQS) (Table 4.1-2). ARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources, and provides districts with the authority to regulate indirect sources.

Among ARB's other responsibilities are overseeing local air district compliance with California and federal laws, approving local air quality plans, submitting SIPs to EPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

ARB and local air pollution control districts are currently developing plans for meeting new national air quality standards for ozone and $PM_{2.5}$. California's adopted 2007 State Strategy was submitted to EPA as a revision to the SIP in November 2007 (ARB 20010c).

Local Plans, Policies, Regulations, and Ordinances

San Luis Obispo Air Pollution Control District

SLOAPCD maintains air quality conditions in SLO County through comprehensive programs of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean-air strategy of SLOAPCD involves the preparation of plans and programs for the attainment of ambient-air-quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The district also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA, CAAA, and CCAA.

In 2009, SLOAPCD adopted a guidelines document for assessment and mitigation of air quality impacts under CEQA. This handbook (SLOAPCD 2009) is an advisory document that provides lead agencies, consultants, and project applicants with uniform procedures for addressing air quality in environmental documents. The guide contains the following applicable components:

- criteria and thresholds for determining whether a project may have a significant adverse impact on air quality,
- specific procedures and modeling protocols for quantifying and analyzing impacts on air quality, and
- methods available to mitigate impacts on air quality

All projects in SLO County are subject to SLOAPCD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the project may include but are not limited to the following:

- Rule 202: Permits
- Rule 203: Applications
- Rule 401: Visible Emissions
- Rule 402: Nuisance
- Rule 403: Particulate Matter Emissions Standards
- Rule 412: Airborne Toxic Control Measures
- Rule 417: Control of Fugitive Emission so Volatile Organic Compounds
- Rule 420: Cutback Asphalt Paving Materials
- Rule 433: Architectural Coatings

The CCAA requires the development of plans to achieve and maintain the state ozone standard by the earliest practicable date. Updates to these plans must be performed every 3 years until attainment is reached. SLOAPCD's 2001 *Clean Air Plan* is the third update to the 1991 plan adopted by the district's board in January 1992. The 1991 *Clean Air Plan* contained a comprehensive set of control measures designed to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. The 1995 *Clean Air Plan* was an extensive update of the 1991 plan, but with fewer control strategies recommended for adoption in response to changes in State law. The 2001 *Clean Air Plan*, similar to the 1998 plan, is primarily a continuation of the 1995 plan and proposes no new control measures for adoption (SLOAPCD 2001:ES-1). No updates to the plan have been made since 2001.

City of Paso Robles

The *City of El Paso de Robles 2003 General Plan* Conservation Element includes following goals and policies relevant to the proposed project (City of Paso Robles 2003):

- **Policy C-2C:** Emissions Reduction. Take steps to reduce creation of air contaminant emissions.

Action Item 3. Require builders to use appropriate techniques to minimize pollution from construction activities.

In addition, the following ordinance from the City's Municipal Code of Ordinances would also be considered as it relates to the project (City of Paso Robles 2010):

4.1.3 20.20.040 - Dust control.

A. Seasonal Conditions. The late afternoon summer winds may cause excessive dust blowing during grading operations. In the event that dust cannot be controlled and becomes a nuisance, the city engineer may order the work to be halted for the day.

B. Dust Control. All graded surfaces and materials shall be wetted, treated or contained in such a manner as to prevent dust from leaving the site.

C. Completion of Grading. The graded site shall be thoroughly wetted in order to form a crust over the exposed dirt surfaces. Further applications or other methods acceptable to the city engineer may be necessary if the site is disturbed.

TOXIC AIR CONTAMINANTS

Air quality regulations also focus on TACs or, in federal parlance, HAPs. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts may not be expected to occur. This contrasts with the criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 4.1-2). Instead, EPA and ARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology for toxics (T-MACT and T-BACT) to limit emissions. These in conjunction with additional rules set forth by SLOAPCD establish the regulatory framework for TACs.

Federal Hazardous Air Pollutant Programs

EPA has programs for identifying and regulating HAPs. Title III of the CAAA directed EPA to promulgate national emissions standards for HAPs (NESHAP). The NESHAP may differ for major sources than for area sources of HAPs. Major sources are defined as stationary sources with potential to emit more than 10 tons per year (TPY) of any HAP or more than 25 TPY of any combination of HAPs; all other sources are considered area sources. The CAAA called on EPA to promulgate emissions standards in two phases. In the first phase (1992–2000), EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring T-MACT. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), EPA was required to promulgate health risk–based emissions standards where deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards.

The CAAA also required EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions, at a minimum to benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 of the CAAA required the use of reformulated gasoline in selected areas with the most severe ozone nonattainment conditions to further reduce mobile-source emissions.

State and Local Toxic Air Contaminant Programs

TACs in California are regulated primarily through the Tanner Air Toxics Act (Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act (Chapter 1252, Statutes of 1987). AB 1807 sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more

than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently, DPM was added to the ARB list of TACs.

Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate T-BACT to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

ARB has adopted diesel-exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus fleet rule and emissions standards for new urban buses. These new rules and standards provide (1) more stringent emission standards for some new urban bus engines beginning with 2002 model year engines, (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies, and (3) reporting requirements under which transit agencies must demonstrate compliance with the public-transit bus fleet rule. New milestones include the low-sulfur diesel fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than current vehicles. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, DPM) have been reduced substantially over the last decade, and they will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of ARB's risk reduction plan, it is expected that DPM concentrations will be reduced by 75% in 2010 and 85% in 2020 from the estimated year-2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

ARB published the *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides guidance concerning land use compatibility with TAC sources (ARB 2006). Although it is not a law or adopted policy, the handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way. A number of comments on the handbook were provided to ARB by air districts, other agencies, real estate representatives, and others. The comments included concern about whether ARB was playing a role in local land use planning, the validity of relying on static air quality conditions over the next several decades in light of technological improvements, and support for providing information that can be used in local decision making.

At the local level, air pollution control or air quality management districts may adopt and enforce ARB control measures. Under SLOAPCD Rule 218 (Federal Requirements for Hazardous Air Pollutants) and Rule 219 (Toxics New Source Review), all sources that possess the potential to emit TACs are required to obtain permits from the district. SLOAPCD limits emissions and public exposure to TACs through a number of programs and prioritize TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

ODORS

Because offensive odors rarely cause any physical harm and no requirements for their control are included in federal or state air quality regulations, SLOAPCD does not have rules or standards related to odor emissions other

than Rule 402: Nuisance. Any actions related to odors are based on citizen complaints to local governments and SLOAPCD.

Two situations increase the potential for odor problems. The first occurs when a new odor source is located near existing sensitive receptors. The second occurs when new sensitive receptors are developed near existing sources of odor. In the first situation, there may be opportunities for operational changes, add-on controls, process changes, or buffer zones where feasible to address odor complaints. In the second situation, the potential conflict is considered significant if the CDCR property is at least as close as any other site that has already experienced significant odor problems related to the odor source. For projects locating near a source of odors where there is no nearby development that may have filed complaints, and for odor sources locating near existing sensitive receptors, the determination of potential conflict is based on the distance and frequency at which odor complaints from the public have occurred in the vicinity of a similar facility.

SLOAPCD's nuisance rule (Rule 402) states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property (SLOAPCD 2010).

GREENHOUSE GASES

Federal Plans, Policies, Regulations, and Laws

EPA is the federal agency responsible for implementing the CAA. The U.S. Supreme Court ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions.

Proposed Greenhouse Gas Permitting Requirements on Large Industrial Facilities

On September 30, 2009, EPA proposed new thresholds for GHG emissions that define when CAA permits under the New Source Review and Title V operating permits programs would be required. The proposed thresholds would tailor these permit programs to limit which facilities would be required to obtain permits and would cover nearly 70% of the nation's largest stationary source GHG emitters—including power plants, refineries, and cement production facilities, while shielding small businesses and farms from permitting requirements.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks

On September 15, 2009, EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) proposed a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the United States. EPA proposed the first-ever national GHG

emissions standards under the CAA, and NHTSA proposed Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act. This proposed national program would allow automobile manufacturers to build a single light-duty national fleet that satisfies all requirements under both federal programs and the standards of California and other states.

Endangerment and Cause or Contribute Findings

On December 7, 2009, EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Endangerment Finding is based on Section 202(a) of the CAA, which states that the Administrator (of EPA) should regulate and develop standards for "emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and therefore the threat of climate change.

The Administrator found that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, and higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHGs fit within the CAA definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but rather allow EPA to finalize the GHG standards proposed earlier in 2009 for new light-duty vehicles as part of the joint rulemaking with the U.S. Department of Transportation.

State Plans, Policies, Regulations, and Laws

ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA, which was adopted in 1988.

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 required that ARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by ARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, in 2004 ARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1) required automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily for the transportation of persons), beginning with the 2009 model year. Implementation of AB 1493 lapsed because of delays in receiving proper approvals from EPA to implement this law under the CAA. California received the necessary approvals June 30, 2009; however, the state has agreed to allow the federal government to implement similar legislation (see "National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks," above).

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, exacerbate California's air quality problems, and potentially cause a rise in sea level. To combat those concerns, the executive order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Assembly Bill 32, Climate Change Scoping Plan

On December 11, 2008 ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations (ARB 2008). The Scoping Plan contains the main strategies California will implement to reduce CO_2e emissions by 169 million metric tons (MMT), or approximately 30%, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10%, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e),
- the Low-Carbon Fuel Standard (15.0 MMT CO_2e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO_2e).

ARB has not yet determined what amount of GHG emissions reductions it recommends from local government land use decisions; however, the Scoping Plan does state that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to

plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate assignment to local government operations is to be determined (ARB 2008).

With regard to local land use planning, the Scoping Plan expects a reduction of approximately 5.0 MMT CO_2e from local land use changes associated with implementation of Senate Bill (SB) 375, discussed below. Also noteworthy is the fact that the Scoping Plan does not include any direct discussion about GHG emissions generated by construction activity.

Executive Order S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at over 40% of statewide emissions. It establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10% by 2020. This order also directed ARB to determine whether this Low Carbon Fuel Standard could be adopted as a discrete early action measure after meeting the mandates in AB 32. ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a GHG performance standard for baseload generation from investor-owned utilities by February 1, 2007. The California Energy Commission (CEC) was required by SB 1368 to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emission rate from a baseload combined-cycle natural gas–fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and CEC.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the state’s Renewable Energy Standard to 33% renewable power by 2020.

Senate Bill 97

As directed by SB 97, the Natural Resources Agency adopted amendments to the State CEQA Guidelines for GHG emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO’s Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years, but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the

targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG emission reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

There are no local laws, regulations, or policies pertaining to GHG emissions.

4.1.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

For the purpose of this analysis, the following thresholds of significance, as identified by the State CEQA Guidelines (Appendix G) and SLOAPCD (2009), have been used to determine whether implementation of the proposed project would result in significant air quality impacts.

Based on Appendix G of the State CEQA Guidelines, an air quality impact is considered significant if implementation of the proposed project would do any of the following:

- conflict with or obstruct implementation of the applicable air quality plan,
- violate any air quality standard or contribute substantially to an existing or projected air quality violation,
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable NAAQS or CAAQS (including releasing emissions which exceed quantitative thresholds for ozone precursors),
- expose sensitive receptors to substantial pollutant concentrations, or
- create objectionable odors affecting a substantial number or people.

As stated in Appendix G, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. Thus, as contained in SLOAPCD's *CEQA Air Quality Handbook* (SLOAPCD 2009), implementation of the proposed project would result in significant air quality impacts if any of the following are equaled or exceeded.

Construction Emissions

Table 4.1-3 presents the SLOAPCD thresholds to determine significance and the appropriate level of mitigation for project-generated short-term construction-related emissions.

Table 4.1-3
San Luis Obispo Air Pollution Control District Thresholds of Significance for Construction-Related Emissions

Pollutant	Threshold		
	Daily (lb/day)	Quarterly (Tier 1)	Quarterly (Tier 2)
		(tons/qtr)	
ROG + NO_X (Combined)	137	2.5	6.3
DPM	7	0.13	0.32
Fugitive PM_{10} (Dust)		2.5	

Notes: DPM = diesel particulate matter; lb = pound; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; qtr = quarter; ROG = reactive organic gases
Source: SLOAPCD 2009

Reactive Organic Gases and Oxides of Nitrogen

- *Daily*—For construction projects expected to be complete in less than one quarter (90 days), exceedance of the 137 pounds per day (lb/day) threshold requires standard mitigation measures;
- *Quarterly (Tier 1)*—For construction projects lasting more than one quarter, exceedance of the 2.5 tons per quarter (ton/qtr) threshold requires standard mitigation measures and BACT for construction equipment. If implementation of the standard mitigation measures and BACT would not result in project-generated emissions below the threshold, off-site mitigation may be necessary; and
- *Quarterly (Tier 2)*—For construction projects lasting more than one quarter, exceedance of the 6.3 tons/qtr threshold requires standard mitigation measures, BACT, implementation of a construction activity management plan (CAMP), and off-site mitigation.

Diesel Particulate Matter

- *Daily*—For construction projects expected to be complete in less than one quarter, exceedance of the 7 lb/day threshold requires standard mitigation measures;
- *Quarterly (Tier 1)*—For construction projects lasting more than one quarter, exceedance of the 0.13 ton/qtr threshold requires standard mitigation measures, BACT for construction equipment; and
- *Quarterly (Tier 2)*—For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires standard mitigation measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Dust Particulate Matter

- *Quarterly*—Exceedance of the 2.5 ton/qtr threshold requires fugitive PM_{10} mitigation measures and may require the implementation of a CAMP.

Operational Emissions

- consistency with the most recent clean air plan for SLO County (e.g., specifically for projects that are plan level);
- comparison of predicted ambient pollutant concentrations resulting from the project to federal and state health standards, when applicable;
- comparison of calculated project emissions to SLOAPCD emission thresholds; and
- evaluation of special conditions that apply to certain projects.

Table 4.1-4 presents the SLOAPCD thresholds to determine significance and the appropriate level of mitigation for project-generated long-term operation-related emissions.

Table 4.1-4 San Luis Obispo Air Pollution Control District Thresholds of Significance for Operation-Related Emissions		
Pollutant	Threshold	
	Daily (lb/day)	Annual (ton/year)
ROG + NO_X	25	25
DPM	1.25	
Fugitive PM_{10} (Dust)	25	25
CO	550	

Notes: DPM = diesel particulate matter; lb = pound; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; qtr = quarter; ROG = reactive organic gases
Source: SLOAPCD 2009

Reactive Organic Gases and Oxides of Nitrogen

- If project-generated ozone precursor emissions (i.e., ROG + NO_X) are below 25 lb/day, no ozone mitigation measures are necessary.
- Projects that would emit more than 25 lb/day or 25 tons per year (ton/year) of ozone precursors (i.e., ROG + NOx) have the potential to cause significant air quality impacts and should be submitted to SLOAPCD for review. On- and off-site mitigation measures are recommended to reduce air quality impacts to a less-than-significant level.

Diesel Particulate Matter

- Projects that emit more than 1.25 lb/day of DPM need to implement on-site BACT measures. If sensitive receptors are within 1,000 feet of the CDCR property, a HRA may also be required.

Fugitive Dust Particulate Matter

- Projects that emit more than 25 lb/day or 25 ton/year of fugitive PM_{10} dust emissions need to implement permanent dust control measures to reduce emissions below the applicable thresholds or provide suitable SLOAPCD-approved off-site mitigation.

Carbon Monoxide

- If modeling shows the potential to violate the CAAQS, mitigation would be required to reduce CO concentrations to a level below the health-based standard.

Special Conditions

Mitigation would be required if:

- the project generates TACs that would result in the exposure of sensitive receptors to substantial pollutant concentrations (i.e., excess cancer risk level 10 in a million);
- the project would place sensitive receptors in close proximity to an existing TAC source (i.e., ambient background risk level of 89 in a million); and
- the project has the potential to cause an odor or other nuisance problem that could impact a considerable number of people (i.e., determine whether the project would result in an odor source in close proximity to

existing sensitive receptors within the distances indicated in Table 4.1-5 or determine whether the project would locate sensitive receptors in the close proximity to an existing odor source that has experienced more than one confirmed complaint [or three unconfirmed] per year averaged over a 3-year period).

Table 4.1-5
San Luis Obispo Air Pollution Control District Nuisance-Related Screening Distances

Type of Operation	Screening Distance (mile)
Asphalt Batch Plant	1
Chemical Manufacturing	1
Coffee Roaster	1
Composting Facility	1
Fiberglass Manufacturing	1
Food Processing Facility	1
Oil Field	1
Painting/Coating Operations	1
Rendering Plant	2
Sanitary Landfill	1
Transfer Station	1
Wastewater Treatment Plant	1

Source: SLOAPCD 2009

Greenhouse Gas Emissions

SLOAPCD has not any thresholds of significance in regards to GHG emissions. Because global climate change impacts of GHG emissions are inherently cumulative, this impact is discussed further in Chapter 5, "Cumulative Impacts."

Project Impacts

Impact 4.1-1: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors

Construction-related emissions are described as "short term" or temporary in duration and have the potential to represent a significant impact with respect to air quality. As discussed separately below, construction-related activities would result in project-generated emissions of criteria air pollutants (e.g., PM_{10}) and precursors (e.g., ROG and NO_X) from site preparation (e.g., demolition, excavation, grading, and clearing); off-road equipment, material delivery, and worker commute exhaust emissions; vehicle travel on paved and unpaved roads, and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings, and trenching for utility installation).

Emissions of ozone precursors are primarily associated with off-road (e.g., gas and diesel) construction equipment exhaust. Worker commute trips and other construction-related activities (e.g., application of architectural coatings) also contribute to short-term increases in such emissions. Emissions of fugitive PM dust (e.g., PM_{10}) are associated primarily with ground disturbance activities during site preparation (e.g., grading) and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and vehicle miles traveled (VMT) on- and off-site. Exhaust emissions from diesel equipment and worker commute trips also contribute to short-term increases in PM_{10} emissions, but to a much lesser extent.

Project-generated, construction-related emissions of ROG, NO_X, and fugitive PM_{10} dust were modeled using the SLOAPCD-recommended Urban Emissions Model 2007 Version 9.2.4 (URBEMIS) (SLOAPCD 2009).

URBEMIS is designed to model construction emissions for land use development projects and allows for the input of project-specific information. Exact project-specific data (e.g., construction equipment types and number requirements, and maximum daily acreage disturbed) were not available at the time of this analysis. Project-generated emissions were modeled based on general information provided in the project description and default URBEMIS settings in order to estimate reasonable worst-case conditions.

Table 4.1-6 summarizes the modeled project-generated, construction-related emissions of criteria air pollutants and ozone precursors. Construction-related air quality impacts were determined by comparing these modeling results with applicable SLOAPCD significance thresholds. Refer to Appendix C for detailed modeling input parameters and results.

Table 4.1-6
Summary of Modeled Project-Generated, Construction-Related Emissions of Criteria Air Pollutants and Precursors

Project Component	Ozone Precursors (ROG + NO_X)		PM_{10} Exhaust (DPM)		Fugitive PM_{10} Dust (ton/qtr)
	(lb/day)[1]	(ton/qtr)	(lb/day)[1]	(ton/qtr)	
Estrella Facility	290.8	1.7	4.4	0.05	0.5
CAL FIRE Conservation Camp	111.9	0.7	2.7	0.02	0.1
Reentry	264.2	1.5	2.5	0.04	0.4
Total (Unmitigated)	666.9	**3.9**	9.7	0.11	0.9
SLOAPCD Significance Threshold[2]	NA[1]	**2.5** (Tier 1) 6.3 (Tier 2)	NA[1]	0.13 (Tier 1) 0.32 (Tier 2)	2.5

Notes: DPM = diesel particulate matter; lb = pound; NO_x = oxides of nitrogen; PM_{10} = respirable particulate matter; qtr = quarter; ROG = reactive organic gases

[1] Daily emissions shown are for winter conditions. Daily thresholds are not shown as the duration of project-related construction activities is not less than one quarter.

[2] Only those pollutants that have applicable SLOAPCD thresholds are shown here. Refer to Appendix X for all project-generated emissions, detailed assumptions, and modeling input/output files.

Bold indicates a threshold exceedance.

Numbers may not sum exactly to totals due to rounding.

Source: Data modeled by Ascent Environmental, Inc. in 2010

As shown in Table 4.1-6, construction-related activities would result in project-generated unmitigated ozone precursor emissions (i.e., ROG + NO_X) of approximately 3.9 ton/qtr. Refer to Impact 4.1-4 for discussion of project-generated construction-related emissions of TACs (i.e., PM_{10} exhaust [DPM]).

Construction-related activities would result in 3.9 ton/qtr of project-generated ozone precursor emissions, which exceeds SLOAPCD's significance threshold of 2.5 ton/qtr (Tier 1). Consequently, project-generated, construction-related emissions of ozone precursors could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this would be a ***significant*** *impact (Impact 4.1-1).*

Impact 4.1-2: Generation of Long-Term Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursors

Project-generated, regional area- and mobile-source emissions of ROG, NO_X, and PM_{10} (of which $PM_{2.5}$ is a subset) were also modeled using URBEMIS. URBEMIS allows land use selections that include project location specifics and trip generation rates. URBEMIS accounts for area emissions from the usage of natural gas,

landscape maintenance equipment, and consumer products; and mobile-source emissions associated with vehicle trip generation.

Regional area- and mobile-source emissions were modeled based on proposed land use types and sizes as described in the project description, trip generation data presented in the traffic analysis prepared for this project, and default URBEMIS settings in order to estimate reasonable worst-case conditions.

Table 4.1-7 summarizes the modeled project-generated, operation-related emissions of criteria air pollutants and ozone precursors. Operation-related air quality impacts were determined by comparing these modeling results with applicable SLOAPCD significance thresholds. Refer to Appendix C for detailed modeling input parameters and results.

Table 4.1-7
Summary of Modeled Project-Generated, Operation-Related Emissions of Criteria Air Pollutants and Precursors

Project Component	Ozone Precursors (ROG + NO_X)		CO (lb/day)
	(lb/day)[1]	(tons/year)	
Estrella Facility	20.4	3.6	72.4
CAL FIRE Conservation Camp	1.9	0.4	4.9
Reentry	14.1	2.5	51.1
Total (Unmitigated)	**36.4**	6.4	128.4
SLOAPCD Significance Threshold[2]	**25**	25	550

Notes: lb = pound; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; qtr = quarter; ROG = reactive organic gases
[1] Daily emissions shown are for winter conditions.
[2] Only those pollutants that have applicable SLOAPCD thresholds are shown here. Refer to Appendix X for all project-generated emissions, detailed assumptions, and modeling input/output files.
Bold indicates a threshold exceedance.
Numbers may not sum exactly to totals due to rounding.
Source: Data modeled by Ascent Environmental, Inc. in 2010

As shown in Table 4.1-7, implementation of the proposed project would result in approximately 36.4lb/day of ozone precursors which would exceed SLOAPCD's threshold (25 lb/day) and 128.4 lb/day of CO, which would not exceed SLOAPCD's applicable thresholds. As shown in Appendix C, long-term operations would result in minimal fugitive PM_{10} dust emissions. Refer to Impact 4.1-4 for discussion of project-generated operational-related emissions of TACs (i.e., PM_{10} exhaust [DPM]) and Impact 4.1-3 for discussion of long-term operation-related (local) mobile-source CO emissions.

As shown in Table 4.1-7, operational-related activities would result in project-generated unmitigated ozone precursor emissions (i.e., ROG + NO_x) of approximately 36.4 lb/day, which would exceed SLOAPCD's applicable threshold. With implementation of the Master Reuse Plan, operation-related activities would result in project-generated 36.4 lb/day of ozone precursor emissions, which exceeds SLOAPCD's significance threshold of 25 lb/day. Consequently, project-generated, operation- related emissions of ozone precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with air quality planning efforts. As a result, this would be a ***significant*** *impact (Impact 4.1-2).*

Please note that the Master Reuse Plan could include stationary sources (e.g., central heating boilers, kitchen equipment in cafeterias, and laundering equipment) of pollutants that would be required to obtain authorities to construct and permits to operate per SLOAPCD rules and regulations (e.g., Rule 202). These emissions are

regulated by SLOAPCD through a separate permit process, and therefore are not modeled in the above analysis. The permit process would ensure that these sources be equipped with the required emission controls and that, individually, these sources would not cause a significant environmental impact. Nonetheless, the emissions from these sources would be additive to the estimated area and mobile source emissions discussed above.

Impact 4.1-3: Generation of Long-Term Operation-Related (Local) Mobile-Source Emissions of Carbon Monoxide

CO concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours, and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land-uses such as residential areas, schools, and hospitals. As a result, it is recommended that CO be analyzed not only at the regional level, but also at the local level. Please refer to Impact 4.1-2 for discussion of regional criteria air pollutants, including CO.

Several air districts in California recently adopted screening criteria for local CO impacts (e.g., Sacramento Air Quality Management District [SMAQMD] and Bay Area Air Quality Management District [BAAQMD]). Those applicable to the proposed project are listed separately below. These screening criteria have been developed in a manner that if met, project-generated long-term operation-related local mobile-source emissions of CO would not violate or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations.

According to BAAQMD, the Master Reuse Plan would result in a less-than-significant impact if the following criterion were met (BAAQMD 2010):

- Project traffic would not increase volumes at affected intersections to more than 44,000 vehicles per hour.

According to SMAQMD, the Master Reuse Plan would result in a less-than-significant impact if the following criterion were met (SMAQMD 2009):

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour.

According to the traffic analysis prepared for the Master Reuse Plan the maximum peak hour traffic volume would be 2,819 at the intersection of U.S. 101 Northbound Ramp/SR 46 East during the p.m. hours. Thus, implementation of the Master Reuse Plan would meet the screening criteria listed above.

Project-generated long-term operation-related local mobile-source emissions of CO would not violate or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations. As a result, this would be a ***less-than-significant*** *impact (Impact 4.1-3).*

Impact 4.1-4: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants

Construction-Related Equipment Emissions

Construction-related activities would result in short-term project-generated emissions of DPM from the exhaust of off-road heavy-duty diesel equipment for site preparation (e.g., excavation, grading, and clearing); paving; application of architectural coatings; and other miscellaneous activities. DPM was identified as a TAC by ARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential noncancer health impacts (ARB 2003). As shown in Table 4.1-6, project-generated construction-related emissions of DPM would be approximately 0.11 ton/qtr, which conservatively assumes 100% of the PM_{10} exhaust emissions from the heavy-duty equipment is DPM. This would not exceed SLOAPCD's significance threshold of 0.13 ton/qtr.

Additionally, the dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TACs to be compared to applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual (MEI). Thus, the risks estimated for a MEI are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project. Consequently, it is important to consider that the use of off-road heavy-duty diesel equipment would be limited to the construction period, which is approximately 1 year in regard to the more equipment intense phases. Also, studies show that DPM is highly dispersive (e.g., decrease of 70% at 500 feet from the source) (ARB 2006, Zhu and Hinds 2002). The nearest existing off-site sensitive receptor is located approximately 750 feet from the CDCR property and inmates would not be located on-site during the construction phase.

Construction-related activities would not result in project-generated DPM emissions that exceed the applicable SLOAPCD significance. In addition, the use of off-road heavy-duty equipment would be temporary and the nearest sensitive receptor is more than 500 feet from the project site (e.g., distance associated with a 70% decrease in emissions). Consequently, project-generated, construction-related emissions of TACs would not result in the exposure of sensitive receptors to substantial pollutant concentrations. As a result, this would be a ***less-than-significant*** *impact (Impact 4.1-4).*

Operation-Related Stationary-Source Emissions

Specific information is not available at this time, but the proposed project could include stationary sources (e.g., central heating boilers, kitchen equipment in cafeterias, and laundering equipment). These types of stationary sources, in addition to any other stationary sources that may emit TACs, would be subject to SLOAPCD rules and regulations (e.g., Rules 218, 219, and 412). Thus, SLOAPCD would analyze such sources (e.g., prepare a health risk assessment if deemed necessary) based on their potential to emit TACs. If it is determined that the sources would emit TACs in excess of SLOAPCD's applicable significance threshold, T-MACT or T-BACT would be implemented in order to reduce emissions. If the implementation of T-MACT or T-BACT would not reduce the risk below the applicable threshold, SLOAPCD would deny the required permit to operate.

More specifically, the siting of new stationary sources of TACs would be subject to SLOAPCD rules and each new stationary source is evaluated to determine whether it has the potential to emit TACs. SLOAPCD assesses the impact from TACs based on its own guidance, as well guidance documents from OEHHA, ARB, and the California Air Pollution Control Officers Association. SLOAPCD requires emission controls (e.g., T-MACT or T-BACT) as deemed necessary.

In addition to T-MACT and T-BACT requirements, permits for equipment that may emit TACs may also contain conditions required by the NESHAPs and ATCMs promulgated by the EPA and ARB, respectively. In short, a new stationary source of TACs would not receive the authority to construct or permit to operate if it would result in:

- an incremental increase in cancer risk greater than 10 in 1 million at any off-site receptor; and/or
- an off-site ground-level concentration of noncarcinogenic TACs generated from the project that would result in a Hazard Index greater than 1 (unless approved by OEHHA).

These permitting requirements are identical to SLOAPCD's thresholds of significance for TACs generated by stationary sources or land uses that included nonpermitted sources (e.g., truck distribution yards). Therefore, lead agencies can determine that a new stationary source of TACs that attains the authority to construct and permit to operate from SLOAPCD would not exceed the district's applicable TAC thresholds of significance.

In addition, with regard to proposed sensitive receptors (e.g., inmates on-site), as shown in Exhibit 4.1-1, the nearest existing stationary sources of TACs are two gasoline-dispensing facilities with throughputs of less than 3.6 million gallons per year. For such sources, ARB recommends a 50-foot separation. Implementation of the proposed project would not result in the placement of sensitive receptors within approximately 1,600 feet, which is well beyond the ARB-recommenced distance.

CDCR would comply with applicable rules and regulation for any proposed stationary sources of TACs and implementation of the proposed project would not locate any proposed sensitive receptors within ARB-recommended separation distances. Consequently, implementation would not result in the exposure of sensitive receptors (existing or proposed) to substantial pollutant concentrations from stationary sources. This would be a ***less-than-significant*** *impact (Impact 4.1-4).*

Please note that it is not known at this time whether the two buildings that would be demolished as part of the Estrella Adult Correctional Facility (Estrella Facility) contain asbestos-related materials. Nonetheless, CDCR would comply with EPA's NESHAP (40 Code of Federal Regulations [CFR] 61, Subpart M), as required by law to prevent the exposure thereof. In addition, according to the California Department of Conservation, the proposed project would not be located in an area likely to contain naturally occurring asbestos (California Department of Conservation 2000). This is addressed in more detail in the Section 4.6, "Hazards and Hazardous Materials."

Impact 4.1-5: Exposure of Sensitive Receptors to Odors

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

SJOAPCD has developed screening-level distances for new major sources of odors such as waste water treatment facilities, food processing facilities, and landfills (SLOAPCD 2009). Implementation of the proposed project would not include the construction or operation of any of the source types identified by SLOAPCD in regards to the exposure of existing receptors. Additionally, there are no existing sources of odors within the identified screening distances in regard to the exposure of the proposed receptors.

Thus, the Master Reuse Plan would not be anticipated to result in the exposure of sensitive receptors to objectionable odors. As a result, this impact would be ***less than significant*** *(Impact 4.1-5).*

4.1.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.1-3: Generation of Long-Term Operation-Related (Local) Mobile-Source Emissions of Carbon Monoxide
Impact 4.1-4: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants
Impact 4.1-5: Exposure of Sensitive Receptors to Odors

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below.

Mitigation Measure 4.1-1: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors

The following SLOAPCD-recommended standard mitigation measures, BACT, and off-site mitigation will be implemented by CDCR to reduce construction-related ozone precursor emissions.

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (nontaxed version suitable for use off-road).
- Use diesel construction equipment meeting ARB's Tier 3 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation.
- Use on-road heavy-duty trucks that meet ARB's 2010 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_X exempt area fleets) may be eligible by proving alternative compliance.
- Limit idling of all on and off-road diesel equipment to no more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.
- Prevent diesel idling within 1,000 feet of sensitive receptors.
- Do not located staging and queuing areas within 1,000 feet of sensitive receptors.
- Electrify equipment when feasible.
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
- Use alternatively fueled construction equipment on-site where feasible (e.g., compressed natural gas, liquefied natural gas, propane, or biodiesel).
- Repower equipment with the cleanest engines available.
- Installing California Verified Diesel Emission Control Strategies.
- Pay into SLOAPCD's off-site NO_X mitigation fund to further reduce construction-generated ozone precursor emissions that exceed SLOAPCD's quarterly Tier 1 significance threshold of 2.5 tons. The fee will be based on the current rate of $16,000 to reduce 1 ton of NO_X. The determination of the final mitigation fee shall be conducted in coordination with SLOAPCD. The fee shall be paid to SLOAPCD in total before any ground disturbance.

Implementation of Mitigation Measure 4.1-1 would reduce construction-related ozone precursor emissions below SLOAPCD's applicable threshold of significance. More specifically, according to URBEMIS model defaults the above mitigation measures related to the on-site control of NO_X from exhaust emissions could reduce emissions up to 40%. The remainder of ROG plus NO_X emissions would be reduced through the payment of off-site mitigation fees. As a result, this impact would be reduced to a less-than-significant level.

Mitigation Measure 4.1-2: Generation of Long-Term Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursors

- Implement continuous dust control measures (e.g., watering) in areas where dust emissions are visible; and
- CDCR will pay into SLOAPCD's off-site NO_X mitigation fund to further reduce operational ozone precursor emissions that exceed SLOAPCD's daily threshold of 25 lb/day. The fee will be based on the current rate of $16,000 to reduce 1 ton of NO_X. The determination of the final mitigation fee will be conducted in coordination with SLOAPCD. The fee will be paid to SLOAPCD in total before any ground disturbance.

Implementation of Mitigation Measure 4.1-2 would reduce operational ozone precursor emissions below SLOAPCD's applicable threshold of significance. More specifically, according to URBEMIS model defaults, the above mitigation measure related to LEED® certification could reduce energy-related emissions associated with the reentry facility up to 20%. The remainder of ROG plus NO_X emissions would be reduced through the payment of off-site mitigation fees. As a result, this impact would be reduced to a **less-than-significant** level.

SIGNIFICANT IMPACTS THAT WOULD REMAIN SIGNIFICANT AND UNAVOIDABLE

No air quality impacts were identified as significant and unavoidable.

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4.2 BIOLOGICAL RESOURCES

This section addresses biological resources that could be affected by implementation of the Paso Robles Property Master Reuse Plan (Master Reuse Plan). The information presented is based on data collected during field surveys, literature review, interpretation of aerial photographs, and information obtained from biological database searches. Reconnaissance-level biological surveys of the 160-acre project site were conducted on May 20, 2009; November 17–18, 2009; and July 13, 2010. The purpose of these surveys was to characterize the existing biological resources, and to evaluate the potential for impacts on sensitive biological resources resulting from implementation of the proposed project.

4.2.1 EXISTING CONDITIONS

The CDCR property, totaling approximately 160 acres, is mostly developed, landscaped, or otherwise disturbed by past land uses associated with operations and maintenance of the previous correctional facility. The property was previously disturbed during construction of the former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility and the CAL FIRE Conservation Camp. The existing CAL FIRE facilities were constructed by 1949 and construction began on the existing DJJ facility buildings in 1951.

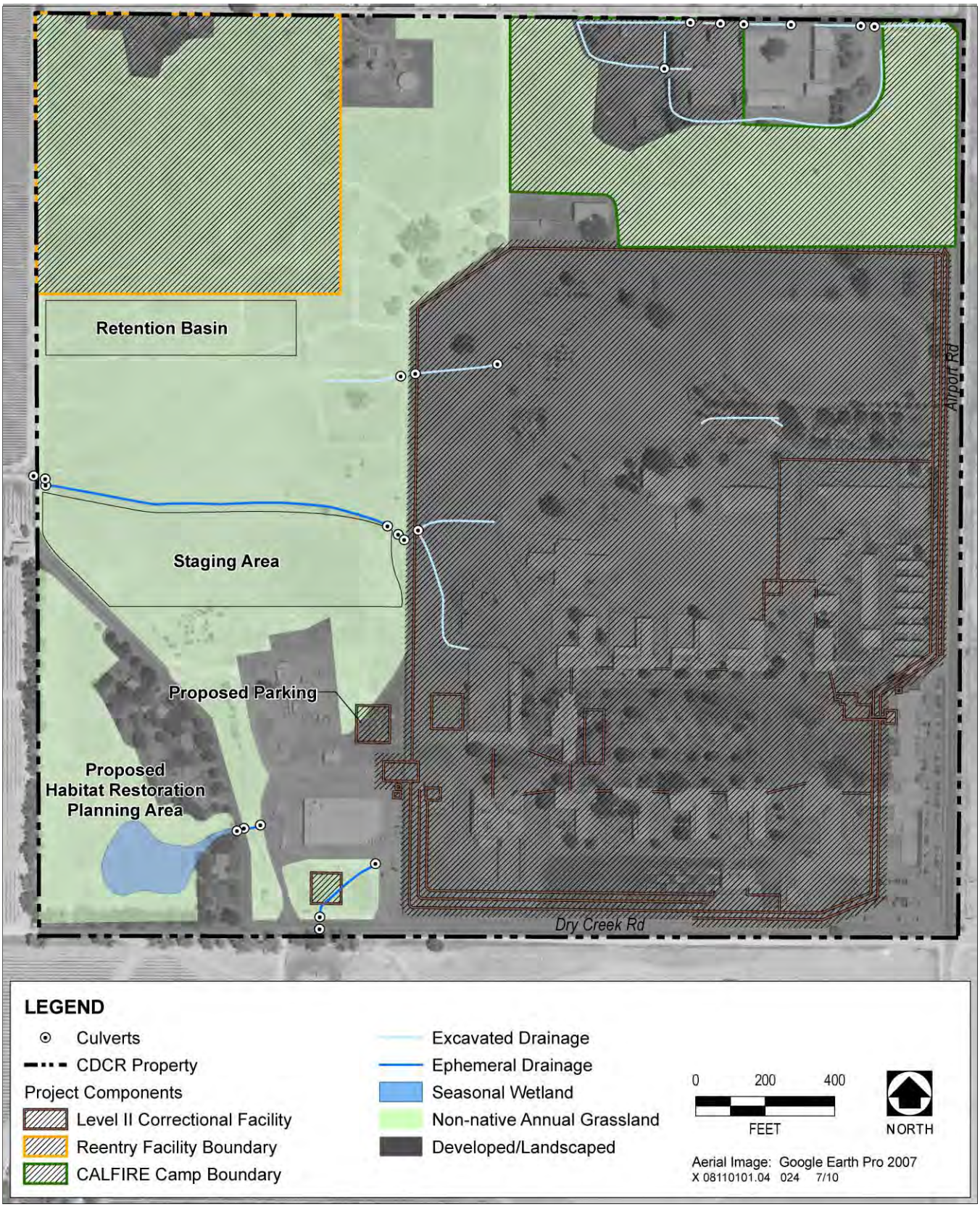
Prior development and ground-disturbing activities have eliminated all natural plant communities from the project area. Undeveloped land in the western portion of the 160-acre project site is dominated by nonnative annual grassland habitat (Exhibit 4.2-1). Evidence of past disturbance in this portion of the site includes a building foundation, unimproved access roads, and piles of debris. The northeastern portion of the project site consists of buildings, impervious surfaces, and annual grassland that are subject to regular maintenance (i.e., mowing). The southwestern portion of the project site is largely developed.

Before the development of the CDCR property, a seasonal drainage meandered through the central and southeastern portions of the property (Vanir Construction Management 2010). Evidence of the seasonal drainage was no longer visible in aerial photographs taken after the grading and construction of the former DJJ facility (Vanir Construction Management 2010). However, some wetland features that are dominated by nonnative plant species remain in the project area, including a seasonal wetland and excavated drainage ditches. The seasonal wetland, located on the southwestern portion of the project site, is supported in part by runoff from impervious surfaces associated with the existing facilities and is located north of Dry Creek Road. Several excavated drainage ditches provide site drainage for the existing facilities.

Vineyards abut the northwestern, western, and southwestern edges of the CDCR property; agricultural row crops are present along the northeastern edge. Native plant communities are not present in areas actively used for agriculture. The Paso Robles Municipal Airport is located east of Airport Road; the land surrounding the airport is landscaped and maintained through regular mowing. Huerhuero Creek is located approximately 0.3 mile south of the project site. Huerhuero Creek is an intermittent stream that meanders through undisturbed nonnative annual grassland; mature valley oaks are present along the stream channel.

VEGETATION

No natural plant communities are present in the project area, and most vegetated areas are landscaped and/or dominated by nonnative plant species. Landscaped vegetation consists of lawns and ornamental plantings that surround many of the existing buildings and athletic fields. Ornamental tree species are planted throughout the project site and include eucalyptus, London plane tree, Russian olive, fig, pomegranate, and ornamental cherry. Two groves of pear and apple orchard trees are present in areas that were formerly used to teach horticulture. Mature eucalyptus trees line the southwestern portion of the project site along Dry Creek Road. Several mature valley oaks are present throughout the 160-acre project site, including within the former DJJ facility site.



Source: Adapted by AECOM in 2010

Project Site Vicinity **Exhibit 4.2-1**

Nonnative grassland habitat is the dominant habitat west of the former DJJ facility on the project site. Nonnative annual grasslands are dominated by invasive weedy annual grasses and forbs including rip-gut brome, Bermuda grass, wild oat, redstem filaree, black mustard, and field bindweed. The vegetation within the drainage ditches is a combination of common weedy species and sporadic native wetland plants, including narrow-leaf cattail and tall flat sedge.

WILDLIFE

The CDCR property provides habitat for a number of native and nonnative wildlife species that are common in this region of San Luis Obispo County. Most of the animals are species that are adapted to urban and agricultural areas. Species observed during field surveys include house sparrow, European starling, Brewer's blackbird, mourning dove, western scrub-jay, and northern mockingbird. One red-shouldered hawk, a common raptor, was observed in the southwest corner of the project site. Mammals observed within the CDCR property include domestic cat, California ground squirrel, black-tailed jackrabbit, raccoon, and red fox.

SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources evaluated as part of this analysis include special-status species and sensitive habitats. The California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2010) were used as the primary sources for information on previously reported occurrences of special-status species and sensitive habitats in the project vicinity. The CNDDB is a statewide inventory, managed by the California Department of Fish and Game (DFG), that is continually updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDB is the most current and reliable tool for tracking occurrences of special-status species, it contains only those records that have been reported to DFG. A search of the CNPS inventory was conducted for Paso Robles and surrounding quadrangles. Other sources of information on sensitive resources that were reviewed include both published and unpublished data and reports collected and prepared for the CDCR electrified fence monitoring program (CDCR 2008, 2009a, 2009b).

Special-Status Species

Special-status species include plants and animals in the following categories:

- plant and wildlife species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- plant and wildlife species considered candidates for listing or proposed for listing;
- wildlife species identified by DFG as fully protected and/or species of special concern; and
- plants identified by CNPS as List 1B (plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere) or plants identified by CNPS List 2 (plants considered by CNPS to be rare, threatened, or endangered in California, but more common elsewhere). The CNPS lists are used by both DFG and USFWS when considering formal species protection under ESA and CESA.

Special-Status Plants

Five special-status plant species have been documented within 5 miles of the CDCR property (Table 4.2-1) (CNDDB 2010, CNPS 2010). None of the special-status plant species are expected to occur on the CDCR property because of the lack of natural vegetation communities in the area and high levels of disturbance associated with site maintenance. All five of these species occur primarily in habitats or on soils not found on the project site, such as vernal pools, and foothill grasslands with alkaline or clay soils. The soils on the CDCR property are sandy and silt textured and do not support vernal pools. An occurrence of San Luis Obispo owl's-

Table 4.2-1 Special-Status Species Known to Occur in the Project Vicinity			
Species	Status	Habitat	Potential for Occurrence
Plants			
Round-leaved filaree *California macrophylla*	CNPS: 1B	Cismontane woodland, valley and foothill grasslands with clay soils	No potential to occur; no suitable habitat present.
San Luis Obispo owl's-clover *Castilleja densiflora* ssp. *obispoensis*	CNPS: 1B	Meadows and seeps, coastal grasslands, sometimes with serpentine soils	No potential to occur; no suitable habitat present.
Lemmon's jewelflower *Caulanthus coulteri* var. *lemmonii*	CNPS: 1B	Pinyon and juniper woodland, dry exposed slopes	No potential to occur; no suitable habitat present.
Jared's pepper-grass *Lepidium jaredii* spp. *jaredii*	CNPS: 1B	Slopes and washes with with adobe, alkaline soils	No potential to occur; no suitable habitat present.
Shining navarretia *Navarretia nigelliformis* ssp. *Radians*	CNPS: 1B	Vernal pools and clay depressions	No potential to occur; no suitable habitat present.
Invertebrates			
Vernal pool fairy shrimp *Branchinecta lynchi*	Fed: Threatened	Vernal pools	No potential for occurrence; no suitable habitat present on the CDCR property.
Amphibians			
Western spadefoot *Spea hammondii*	CA: Species of Special Concern	Vernal pools in upland with burrows and other belowground refuges	No potential for occurrence; no suitable habitat present on the CDCR property.
Southwestern pond turtle *Actinemys marmorata pallida*	CA: Species of Special Concern	Ponds, lakes, rivers, streams, marshes, irrigation ditches	No potential for occurrence; no suitable habitat present on the CDCR property.
Birds			
Burrowing owl *Athene cunicularia*	CA: Species of Special Concern	Grasslands and agricultural fields	Could occur; no suitable burrows observed on-site but suitable foraging habitat is present.
Golden eagle *Aquila chrysaetos*	CA: Fully Protected	Steep cliffs and mature trees for breeding; open areas of farms, ranches, grasslands, montane valleys for foraging	Unlikely to occur; only marginally suitable habitat present on the CDCR property.
Loggerhead shrike *Lanius ludovicianus*	CA: Species of Special Concern	Lowland and foothill areas with scattered shrubs and trees; foraging in grasslands and agricultural fields	Could occur; suitable foraging and nesting habitat is present in grasslands and fallow agricultural fields in the vicinity of the CDCR property.
Mammals			
San Joaquin kit fox *Vulpes macrotis mutica*	Fed: Endangered CA: Threatened	Grasslands and open scrub with loose-textured soils for burrowing.	Unlikely to occur; no suitable habitat present on CDCR property.
Sources: CNDDB 2010, CNPS 2010			

clover has been documented within 1 mile of the project site. However, this species typically occurs in coastal grassland habitats and the occurrence south of the project site co-occurs with two closely related members of the same genus (i.e., *Castilleja densiflora* ssp. *gracilis* and *Castilleja attenuata*). Because of the presence of other closely related plants, the occurrence of San Luis Obispo owl's-clover south of the project site is likely a hybridized population (CNDDB 2010). The inland location of the project site and the highly disturbed nature of the CDCR property decrease the probability that San Luis Obispo owl's-clover would occur within the project area.

Special-Status Wildlife

Seven special-status wildlife species were determined to have potential to occur in the project vicinity (Table 4.2-1), based on the CNDDB search results and other information sources. Three species (vernal pool fairy shrimp, western spadefoot, and western pond turtle) are included in Table 4.2-1 but are not evaluated further because they are restricted to vernal pools and/or other aquatic habitats that are not present within the project vicinity.

The burrowing owl is a California Species of Special Concern. Habitat for this species is characterized by low-growing vegetation and may include annual and perennial grasslands, deserts, agricultural lands, and open scrub habitat. Burrowing owls nest and roost in burrow systems created by medium-sized mammals (e.g., ground squirrels), artificial sites, or self-dug burrows where soil conditions are appropriate. The nearest documented occurrence of burrowing owl activity is approximately 7 miles northwest of the CDCR property at Camp Roberts (CNDDB 2010). Small-mammal burrows were observed in the nonnative annual grassland habitat; however, these burrows appear to be a result of vole activity and are too small for occupation by burrowing owls. No burrowing owls or evidence of their potential presence on or immediately adjacent to the CDCR property was observed during the reconnaissance surveys conducted by project team biologists. However, the nighttime lighting required of the proposed Estrella Adult Correctional Facility (Estrella Facility) may attract insects to the project site that could attract burrowing owls in search of prey. Therefore, it is assumed that this species could occur in the project area.

San Joaquin kit fox is listed as federally endangered and state threatened. The historic range of the kit fox has been greatly reduced by the conversion of natural habitat to agricultural and urban uses, and by oil development. San Joaquin kit fox has also been adversely affected by the use of rodenticides, disease, competition with larger canids, and factors related to increasing human populations (USFWS 1998). High-quality kit fox habitat includes annual grasslands or open shrubland with friable soils for burrows and sufficient food supply, including small mammals and rodents. In the project vicinity, San Joaquin kit fox was historically known to inhabit the area west of U.S. Highway 101 near Camp Roberts located approximately 7 miles northwest of the project site; however, this population was decimated by rabies during the late 1990s (White 2000). There is also a 2007 occurrence of San Joaquin kit fox located south of SR 46, west of Golden Hill Road, and north of Linne Road (CNDDB 2010). Although kit foxes have been documented within 2.5 miles of the project vicinity and could migrate near the project area, they are not expected to occur in the project area because the entire site is developed or otherwise disturbed and the existing perimeter fencing provides a substantial barrier to movement through the site. Additionally, the surrounding land uses (i.e., field crops and vineyards) are not considered suitable kit fox habitat.

Other special-status wildlife species that could occur in the project vicinity include golden eagle and loggerhead shrike. Golden eagle is listed as Fully Protected under the California Fish and Game Code. Open space areas located to the south and east of the project site provide suitable foraging habitat for this species. Golden eagles typically nest in large trees or in cliff edges near water and require large natural areas of woodland and open grasslands for foraging. The nearest documented nest location is south of the project site, along Huerhuero Creek.

The CNDDB contains a 2006 occurrence of a golden eagle nest located in a mature blue oak tree along the west bank of Huerhuero Creek, approximately 1 mile south of the project site (CNDDB 2010). Huerhuero Creek is surrounded by undisturbed nonnative annual grassland, which provides suitable foraging habitat for golden eagle.

Golden eagle is not expected to occur within the project area because of the high level of disturbance and human activity.

The loggerhead shrike is a California Species of Special Concern that inhabits lowland and foothill areas with scattered shrubs and trees. This species nests in shrubs and small trees and typically forages in grasslands and agricultural fields. Suitable foraging and nesting habitat is present in grasslands and fallow agricultural fields in the vicinity of the CDCR property. Although the loggerhead shrike has not been documented in the CNDDB within 5 miles of the project site (CNDDB 2010), this species does have the potential to occur based on the presence of suitable habitat.

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies, or that are afforded specific consideration through CEQA, Section 1600 of the California Fish and Game Code, and/or Section 404 of the federal Clean Water Act (CWA) as discussed in Section 4.2.2, "Regulatory Background."

Sensitive habitat on the CDCR property includes three ephemeral drainages and a seasonal wetland in the southwest corner of the project site. The excavated ditches surrounding developed areas are not considered sensitive habitats because these areas were excavated in uplands and do not provide functions characteristic of wetlands, nor are wetland or native plants present in these areas. The seasonal wetland located in the southwestern portion of the CDCR property does not connect to downstream waters of the United States. This wetland is located in a topographic low portion of the CDCR property and receives runoff from the surrounding nonnative annual grassland and from an ephemeral drainage that conveys drainage water from a parking lot. The three ephemeral drainages and the seasonal wetland within the project area provide low quality habitat for wildlife due to the small amount of habitat present, the relative lack of native vegetation, lack of vegetative structure which provides cover and foraging habitat, and the habitat surrounding the ephemeral drainages and seasonal wetland is disturbed or developed.

The three excavated ephemeral drainages present within the project area were created in upland habitat to convey drainage water away from developed portions of the project site, as described below.

- The ephemeral drainage located along Dry Creek Road, east of the facility's existing west entrance gate, connects to an off-site intermittent stream, Huerhuero Creek, a water of the United States. This ephemeral drainage is dominated by nonnative grasses including Johnsongrass, as well as tall flat sedge, a native species.

- A short ephemeral drainage is also present east of the seasonal wetland. This ephemeral drainage conveys flow from the western portion of the existing support facilities, though a culvert under an unnamed paved road, and into the seasonal wetland located at the southwest corner of the project site.

- The ephemeral drainage located in the nonnative grassland habitat on the undeveloped western portion of the project site flows west off-site into agricultural roadside ditches that parallel the vineyards adjacent to the CDCR property. Nonnative grasses and forbs are the dominant vegetation in this ephemeral drainage, although a small section of the drainage is colonized by broad-leaf cattail near the perimeter fence of the former DJJ facility.

The ephemeral drainages are potentially subject to Section 404 of the CWA as waters of the United States because these features have an ordinary high-water mark and are dominated by wetland plants, and because one ephemeral drainage has a direct connection to other waters of the United States (*e.g.*, Huerhuero Creek). The U.S. Army Corps of Engineers (USACE) requires a permit for the modification or placement of material into any water of the United States. These features may also be regulated under Section 401 of the CWA, which is implemented by the regional water quality control boards (RWQCBs), in this case the Central Coast RWQCB. The ephemeral drainage may be regulated under Section 1600 of the California Fish and Game Code, the Streambed Alteration Agreement program, which is implemented by DFG.

4.2.2 REGULATORY BACKGROUND

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Endangered Species Act

Pursuant to the ESA, the U.S. Fish and Wildlife Service (USFWS) has regulatory authority over federally listed species. Under ESA, a permit to "take" a listed species is required for any federal action that may harm an individual of that species. Take is defined under ESA Section 9 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under federal regulation, take is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for international migratory bird protection and authorizes the Secretary of the Interior to regulate the taking of migratory birds. MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird. The current list of species protected by MBTA can be found in Title 50, Code of Federal Regulations Section 10.13. The list includes nearly all birds native to the United States. Loss of nonnative species, such as house sparrows, European starlings, and rock pigeons, are not covered by this statute.

Clean Water Act

Section 404 of the CWA requires project proponents to obtain a permit from USACE before performing any activity that involves any discharge of dredged or fill material into "waters of the United States," including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Many surface waters and wetlands in California meet the criteria for waters of the United States.

In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB, in this case the Central Coast RWQCB, indicating that the project would uphold state water quality standards.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Endangered Species Act

Pursuant to the CESA, a permit from DFG is required for projects that could result in the take of a plant or animal species that is state listed as threatened or endangered. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the CESA definition of take does not include "harming" or "harassing," as the ESA definition does. As a result, the threshold for take is higher under CESA than under ESA. Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2080.1 consistency determination or a Section 2081 incidental take permit.

California Fish and Game Code Section 1602—Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by DFG under Section 1602 of the California

Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying DFG:

- substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. DFG's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A DFG streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

California Fish and Game Code Section 3503 and 3503.5—Protection of Bird Nests and Raptors

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Fully Protected Species under the Fish and Game Code

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take of fully protected species. DFG has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, "waters of the state" fall under the jurisdiction of the appropriate RWQCB. The RWQCB must prepare and periodically update water quality control plans (basin plans). Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters of the state must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

Statewide Lethal Electrified Fence Project

The project includes a proposed lethal electrified fence that is similar to those found at other state prisons in California. After a prototype fence at Calipatria State Prison in Imperial County became operational in 1993, CDCR personnel found that unanticipated accidental wildlife electrocutions had occurred. To address this unexpected effect, consultation was conducted between CDCR, DFG, and USFWS. Based on this consultation, CDCR determined that a statewide EIR was needed to assess impacts on wildlife by operation of the lethal electrified fence at 25 existing state prisons and four planned facilities to identify feasible mitigation measures. CEQA documents prepared for the Statewide Fence Project include *Draft Environmental Impact Report (DEIR), Statewide Electrified Fence Project* (CDCR 1996); *Final Environmental Impact Report (FEIR), Statewide Electrified Fence Project* (CDCR 1997); and *FEIR Addendum, Statewide Electrified Fence Project* (CDCR 1999).

Impacts of the lethal electrified fence on species covered by the ESA and CESA, and migratory birds, were evaluated further in 1999 when CDCR prepared a habitat conservation plan (HCP) for the Statewide Electrified Fence Program. The USFWS issued a Threatened and Endangered Species Take Permit covering 62 wildlife species to CDCR for the project on June 12, 2002. The permit expires in the year 2052 (EDAW 2003).

The approved Statewide Electrified Fence Project HCP includes numerous mitigation measures designed to minimize wildlife use of the areas nearest the lethal electrified fence and to deter wildlife from making contact with the lethal electrified fence. An extensive feasibility evaluation was conducted by CDCR to determine which mitigation measures were biologically effective, cost effective, and viable based on weather, security, maintenance, and operational issues. Mitigation in the HCP was organized and implemented in three tiers:

- *Tier 1* includes operational measures designed to modify or remove habitat or other attractants to wildlife from the secured perimeter area of each prison.
- *Tier 2* involves installing exclusion and deterrent devices on the lethal electrified fences and in the perimeters.
- *Tier 3* includes a compensation package designed to offset the residual loss of wildlife resources at each prison as a result of electrocution risks that remain even after Tier 1 and Tier 2 have been implemented.

The plan also includes a wildlife mortality monitoring program that requires that a qualified biologist visit each institution with an operational lethal electrified fence three times per year to identify carcasses of animals collected by CDCR staff from the lethal electrified fence's perimeter.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Paso Robles General Plan

The following biological resources policies identified in the Conservation Element of the *City of El Paso de Robles General Plan* (City of Paso Robles 2003) may be relevant to this project. It should be noted that CDCR, as a state agency, is a sovereign entity and is not subject to local plans and policy regulations. Nonetheless, the applicable local plans and policies are presented to inform CDCR decision-makers.

- **Policy C-3A.** Oak Trees. Preserve existing oak trees and oak woodlands and promote the planting of new oak trees. The City's Oak Tree Preservation Ordinance shall be implemented and new oaks, when feasible, will be planted on new developments where appropriate.
- **Policy C-3B.** Sensitive Habitat. Incorporate habitats into project design, as feasible, including: oak woodlands, native grasslands, wetlands, and riparian areas. Biological studies/surveys will be prepared when appropriate to assess habitat value. Alternatives to habitat removal will be explored; and input will be sought from other public agencies with expertise in biological resources. As part of the environmental review of new development projects, the City will require that mitigation for potential impacts to the San Joaquin kit fox and its habitat be provided in consultation with the CA Department of Fish and Game and the U.S. Fish and Wildlife Service.

Chapter 10 of the City of Paso Robles' (City's) Municipal Code of Ordinances states that removal of oak trees greater than 6 inches in diameter at breast height (dbh) (i.e., 54 inches above the ground surface level) on private or public property within the city limits requires a tree removal permit. The removal of healthy oak trees shall require the planting of replacement oaks at a ratio of 0.25:1, measured at dbh.

4.2.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G and Section 15065 of the State CEQA Guidelines, a biological resources impact is considered significant if implementation of the proposed project would do any of the following:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by DFG or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by DFG or USFWS;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, rivers, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP;
- substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife species to drop below self-sustaining levels, or threaten to eliminate a plant or animal community; or
- substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

Project Impacts

Impact 4.2-1: Impacts on Sensitive Habitats

Sensitive habitats within the 160-acre project site include three ephemeral drainages (which are degraded), one seasonal wetland, and native oak trees. No construction activities or development is planned for the area that includes the seasonal wetland. Three ephemeral drainages are present on the 160-acre project site. The ephemeral drainages are low quality because they are dominated by nonnative plant species, lack vegetative diversity and structural complexity, and are near areas that are subject to regular disturbance or human activity. It is anticipated that most of the ephemeral drainage habitat identified in the preliminary mapping can be avoided because they are outside of the proposed project construction footprint.

One ephemeral drainage could potentially be disturbed with implementation of the proposed project. A new parking lot for the Estrella Facility would be constructed in the area of an ephemeral drainage that flows south off the CDCR property and connects downstream to Huerhuero Creek (Exhibit 4.2-1). Based on current plans, this drainage might be affected by the project, but it also may be avoided; more detailed, construction level plans would confirm the potential for this drainage to be affected. This ephemeral drainage conveys drainage water away from areas that are currently developed. Because the ephemeral drainage is narrow, dominated by nonnative plant species, and surrounded by developed areas with high levels of human activity, the habitat value of this channel is considered low. Fill of this drainage, if it occurs, would not substantially affect wetland habitat and is

not significant, even if a regulatory permit may be required. Within the proposed CAL FIRE footprint, excavated ditches are present. The excavated ditches were constructed in uplands to convey precipitation and runoff away from developed areas. Wetland plants are not present in the shallow excavated ditches within the proposed CAL FIRE footprint. There are no wetlands or other waters of the United States within the footprint of the proposed Central Coast Regional Secure Community Reentry Facility (SCRF).

In general, CDCR would not allow trees within a prison facility due to security; they can affect site lines, be aids to escape if they overhang or are near fences, and can be used to hide confiscatory material (such as weapons). In the case of the project, considering the high community value and policies of the City of Paso Robles pertaining to oak tree preservation, CDCR has carefully inspected the site and each oak tree to determine if some could be retained, while still maintaining adequate security. Four mature valley oak trees and one mature coast live oak would require removal along the northwest corner outside of the existing perimeter fence of the Estrella Facility and within the facility's perimeter and for the construction of the SCRF. Removal of other tree species would also be required to maintain high visibility within and surrounding the proposed Estrella Facility. Oak tree removal is not anticipated within the proposed CAL FIRE footprint. Mature oak trees provide important habitat for birds and other wildlife species. The oak trees that would be removed are considered potential nesting habitat for common and special-status raptors. The removal of five native oak trees, totaling 209 inches at dbh, within the Estrella and reentry project areas would be a potentially significant impact.

Implementing the Master Reuse Plan could result in the fill, during construction of the Estrella Facility, of one ephemeral drainage that provides low-quality habitat. Because the habitat quality is low and is subject to continuous disturbance under existing conditions, this is not a significant impact to wetlands. Impacts on wetlands and waters would be ***less than significant*** *(Impact 4.2-1). Five mature oak trees would be removed from the Estrella and reentry facility footprints, resulting in impacts to nesting and wildlife habitat. Impacts to oak trees would be* ***potentially significant*** *(Impact 4.2-1).*

Impact 4.2-2: Impacts on Special-Status Species

Although several special-status species are known to occur in the vicinity of the CDCR property, many of these species have no potential to occur on the CDCR property because of the lack of natural plant communities and because the CDCR property is largely developed, landscaped, or subject to regular disturbance associated with lawn maintenance (i.e., mowing). Many of the special-status species documented in the vicinity of the CDCR property, as shown in Exhibit 4.2-1, require habitat types with sustained hydrology such as vernal pools, intermittent drainages, or ponds, which are not present. The San Joaquin kit fox has been documented in the project vicinity (CNDDB 2010). However, the kit fox is not expected to occur on the CDCR property because only low-quality habitat is present. The habitat value is reduced further by the high-level routine disturbance associated with landscape maintenance and human activity. The potential for kit foxes to occur on property immediately adjacent to the CDCR property is also considered low because vineyards and other agricultural land uses are generally considered marginally suitable or unsuitable habitat for this species. Therefore, impacts on San Joaquin kit fox would be less than significant.

A number of special-status birds are known to occur in the vicinity, but the CDCR property provides limited foraging habitat for most of these species because a large portion of the property is previously developed. The nonnative annual grasslands present on the CDCR property and the fallow agricultural fields located to the north provide suitable foraging habitat for loggerhead shrike, a California Species of Special Concern. Although only small areas of marginally suitable nesting habitat would be removed by the project, implementation of the Master Reuse Plan would result in a potentially significant impact because it could result in the loss of an active loggerhead shrike nest. No direct observation or evidence of loggerhead shrike was found during field surveys. Special-status and common raptors could utilize mature oak trees within the footprint of the proposed Estrella and reentry facilities as nesting sites. The Master Reuse Plan would result in the removal of five mature native oaks and would result in the loss of suitable raptor nest sites on the Estrella and reentry sites. The loss of an active raptor nest would be a significant impact. Though not identified at the time of the field survey and not documented within a 5-mile radius of the CDCR property, burrowing owls could occur within the Estrella and

CAL FIRE sites. Potential habitat for this species is considered marginal and no evidence of burrowing owl use was found during field surveys. Nonetheless, because habitat is present and this species could occur, the loss of an active burrowing owl burrow would be a potentially significant impact.

Implementation of the Master Reuse Plan would result in the removal of mature valley oak trees that provide suitable nesting habitat for common and special-status raptors. Although habitat is only marginally suitable, burrowing owls and loggerhead shrike could potentially occur within proposed facility footprints. The loss of mature oak trees (suitable nesting habitat for common and special-status raptors), and the potential loss of burrowing owl and raptor nesting habitat would be a ***potentially significant*** *impact (Impact 4.2-2).*

Impact 4.2-3: Impacts of Lethal Electrified Fence on Wildlife

The proposed Estrella Facility includes installation and operation of a lethal electrified fence within the double-fenced security perimeter. A lethal electrified fence is not proposed for the CAL FIRE facility or reentry facility. Based on statistics from other CDCR facilities with lethal electrified fences, electrocution of wildlife species, primarily birds, is expected to result after the fence becomes operational. Lethal electrocution would result only when an animal touches two wires simultaneously or touches one wire and an electrical ground. Therefore, birds and other wildlife could come in contact with the lethal electrified fence without being electrocuted. Based on monitoring data collected for the existing lethal electrified fences at CDCR prisons, birds are by far the most common wildlife group electrocuted, with mammals making up a relatively small percentage (CDCR 2009a, 2009b).

The magnitude of this impact can generally be predicted by analyzing data from CDCR facilities with lethal electrified fences in this region of California. A perimeter lethal electrified fence is in operation at California Men's Colony East (CMC-E), located approximately 24 miles to the southeast of the CDCR property. CMC-E is located north of San Luis Obispo, south of the El Chorro Regional Park and the Los Padres National Forest. Nonnative species have accounted for approximately 43% of the total mortality at CMC-E over the past 3 years. An average of 31 individuals of native species, none of which are considered sensitive, were killed per year at CMC-E during the 2007–2008 and 2008–2009 monitoring periods (CDCR 2008, 2009a). CDCR categorizes sensitive species as those that meet the definition of special-status described above, as well as common raptor species. During July 2009, one sensitive species was killed on the lethal electrified fence at CMC-E, a loggerhead shrike. No species listed as threatened or endangered or candidates for listing under the ESA or CESA have been electrocuted on the CMC-E perimeter lethal electrified fence (CDCR 2008, 2009a).

Mortality of native wildlife species and sensitive wildlife at the proposed Estrella Facility is expected to be lower than at CMC-E because of the lack of surrounding native vegetation communities compared to what surrounds the CMC-E facility. It can be assumed, based on statistical results from other CDCR facilities, that common birds would compose a very high percentage of the total wildlife electrocutions; however, it is not possible to accurately predict the species that would be killed or the frequency of electrocutions that would result from a lethal electrified fence at the proposed Estrella Facility. Monitoring results collected at other state prisons since 1994 supports the following assumptions:

- A lethal electrified fence at the proposed Estrella Facility could result in over 100 wildlife electrocutions annually. Statewide, in the 12-month period from June 2008 to June 2009, the total number of wildlife electrocutions, including birds, at each of the state prisons with lethal electrified fences ranged from four to 768 animals (CDCR 2009a, 2009b). During that period, 3,902 animals were electrocuted at 28 prisons (CDCR 2009a, 2009b).

- Of the total, the large majority of animals electrocuted would be birds; avian species account for more than 95% of the statewide total in the most recent year of monitoring (CDCR 2009a, 2009b).

- Nonnative birds (e.g., house sparrow, European starling) would account for a substantial percentage of the total electrocutions. Statewide, nonnative species accounted for 64% of the total electrocutions in the last

12-month monitoring period (CDCR 2009a, 2009b). Sensitive species are anticipated to account for a very low percentage of electrocutions at the proposed Estrella Facility because of the lack of suitable surrounding habitat, high level of disturbance associated with the proposed Estrella Facility, and the low occurrences of sensitive species electrocutions at CMC-E, which is comparable to the environment where the proposed Estrella lethal electrified fence would be constructed.

To compensate for the loss of oak trees that would result from project implementation (see Impact 4.2-1 above), CDCR proposes establishing a restoration area in the southwest portion of the CDCR property. Currently, there is no evidence to suggest that establishment and maintenance of the restoration area would result in any increase in the potential for wildlife mortality compared to baseline conditions. The restoration area would be located approximately 580 feet from the closest section of the lethal electrified fence. In addition, the ruderal vegetation that currently dominates the restoration site attracts many of the bird species considered to be at risk of electrocution. The species are expected to occur in roughly the same number after completion of the proposed restoration. Because the potential for wildlife electrocution is not expected to differ substantially with implementation of the restoration component that would result in establishment of the valley oak restoration area, the restoration component would not measurably increase the magnitude of the impact described above.

Operation of a lethal electrified fence at the proposed Estrella Facility would result in the death of an undetermined number of animals. The large majority of electrocutions would result in the death of birds, some of which are protected under MBTA and the Fish and Game Code. This impact would not eliminate any resident or migratory bird species and it is not expected to reduce species diversity in the project vicinity. Although not expected, it is possible that the local population of one or more native birds, protected by MBTA and the Fish and Game Code, could be substantially affected. Therefore, this would be a ***potentially significant*** *impact (Impact 4.2-3).*

Impact 4.2-4: Impacts on Wildlife Movement

The CDCR property is bordered by agricultural land uses to the north and west, and a portion of the CDCR property is developed. The 160-acre property is currently surrounded by a 12-foot-tall cyclone perimeter fence that prevents the site from functioning as a substantial wildlife movement corridor and currently impedes wildlife movement. Within the existing perimeter cyclone fence, an existing cyclone fence surrounds the proposed Estrella Facility. The implementation of the Master Reuse Plan, including the replacement of fencing surrounding the Estrella and CAL FIRE facilities and installation of new fencing around the reentry facility, would not substantially interfere with wildlife movement, the establishment of migratory corridors, or impediments to the use of important nursery sites because all new fences would be installed within or along the same alignment as existing perimeter cyclone fencing that surrounds the CDCR property. No new fences are proposed for the proposed CAL FIRE facility.

Implementation of the Master Reuse Plan would not substantially interfere with wildlife movement because the CDCR property does not link any areas of open space that serve as important wildlife habitat and does not serve as a wildlife migration corridor or wildlife nursery site. All proposed fences would be installed within or along the same alignment at the existing perimeter fence. This impact would be ***less than significant*** *(Impact 4.2-4).*

Impact 4.2-5: Consistency with Local Plans, Policies, and Ordinances

CDCR, as a state agency, is a sovereign entity and is not subject to local plans and policy regulations. Local policies and ordinances through the *City of El Paso de Robles General Plan* (2003) protect sensitive biological resources in the vicinity of the CDCR property. Specifically, City policies require a tree removal permit. Implementation of the Master Reuse Plan would result in the removal of five mature native species, including four valley oaks and one coast live oak, and has the potential to adversely affect special-status species, including raptors, by decreasing suitable nesting habitat. The City considers removal of any native oak tree greater than 6 inches at dbh to be a significant impact. This adopted threshold is an indication of a significant local impact on native trees. Removal of nonnative trees would not be considered a significant impact under CEQA because

nonnative trees are not considered an important biological resource. Further, the removal of nonnative trees is not identified as a significant impact on a local level by the City. Although CDCR is not subject to local plans and policies, CDCR does consider such plans in determining whether a significant local impact would occur.

Because native tree species provide important habitat for special-status species and removal of mature trees (trees greater than 6 inches at dbh) could degrade this habitat, CDCR considers the removal of mature native trees at the Estrella Facility and reentry facility to be a ***significant*** *impact (Impact 4.2-5).*

4.2.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impacts were identified as less than significant, and therefore no mitigation is required:

Mitigation Measure 4.2-4: Impacts on Wildlife Movement

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as potentially significant or significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below.

Mitigation Measure 4.2-1: Impacts on Sensitive Habitats

CDCR will implement the following measures to reduce impacts on native oak trees:

- Replace all native oak trees removed by project construction activity at an quarter inch-for-inch ratio. Replacement trees will be planted in the proposed restoration area (approximately 10 acres in size) in the southwest portion of the CDCR property where suitable soils are present to support the trees. Within the proposed restoration area, an area will be specifically designated as a “native oak restoration zone.” CDCR will be responsible for ensuring that uses and activities not consistent with protection of replacement oaks are prohibited within the oak tree restoration area.

- Ensure that a restoration and maintenance plan is prepared by a qualified biologist. At a minimum, the restoration and maintenance plan will include the following information and/or adhere to the following guidelines:

  - A plant palette will specify the number of oaks to be planted, the specific location of the plantings, and sizes of planting containers. The plant palette will also specify any associated native planting. All associated planting and maintenance activities will be consistent with maintaining healthy replacement trees developing oak woodland habitat similar in characteristic to valley oak woodland habitat located in the project vicinity. No ornamental trees and shrubs will be planted in the restoration area.

  - All replacement oak trees will originate from local genetic stock. The size of replacement trees will be selected to ensure long-term restoration success. Container plants will be planted after the onset of fall rains and before the end of January.

  - Before planting begins, the restoration area will be cleared of weedy vegetation that could compete for moisture and sunlight. Weed-free planting circles with 4-foot diameters will be established before the planting of oaks.

- The restoration plan prepared for the Master Reuse Plan will include provisions for the installation of a temporary irrigation system. Irrigation guidelines and specifications will be developed by a qualified biologist and incorporated into the restoration plan.

- The restoration plan will include a detailed description of recommended routine maintenance activities for the restoration area. Activities that are allowable and prohibited within the restoration area will be identified.

- The restoration plan will include a 5-year monitoring plan and describe the information to be collected on an annual basis, including oak health, survival, and growth; evidence of natural oak recruitment; presence of noxious weed species; and detection of animal or insect damage to oaks.

- The restoration plan will include annual success standards at regular milestones to help determine when the oak trees are established and self-sustaining. The primary success standards will include survival rates of oaks. The plan will include remedial measure that would need to be implemented if the success standards are not met at specified milestones. It is recommended that a minimum 80% survival rate be attained at the end of a 5-year period. The plan will describe remedial measures that will be implemented if the success standards are not met.

Implementation of these mitigation measures would reduce the impact to a less-than-significant level because trees lost through construction activities would be replaced on site.

Mitigation Measure 4.2-2: Impacts on Special-Status Species

If trees are removed between September 1 and February 15, then no mitigation will be required to reduce impacts on nesting raptors. If trees are removed between February 16 and August 31, CDCR will implement the following measures to reduce impacts on nesting raptors:

- Retain a qualified biologist to conduct preconstruction surveys for loggerhead shrike and active raptor nests on and within 0.5 mile of the 160-acre project site no more than 14 days and no less than 7 days before tree removal. If no active nests are found, then no further mitigation will be required.

- If active nests are found, ensure that the qualified biologist establishes a buffer around the tree where the active nest is located. No project activity will commence within the buffer area until the qualified biologist confirms that the nest is no longer active or that the young have fully fledged. Monitoring of the nest by a qualified biologist may be required if the activity has potential to adversely affect the nest.

CDCR will implement the following measures to reduce impacts on burrowing owl:

- Retain a qualified biologist to conduct focused surveys for burrowing owls in areas of suitable habitat on and within 250 feet of the CDCR property. Surveys will be conducted before project activity and in accordance with DFG protocol (DFG 1995).

- If no occupied burrows are found in the survey area, submit a letter report documenting survey methods and findings to DFG, and no further mitigation is necessary. If occupied burrows are found, to the extent feasible, establish a buffer of 165 feet around the occupied burrow during the nonbreeding season (September 1–January 31) or 250 feet during the breeding season (February 1–August 31). The size of the buffer area may be adjusted if a qualified biologist and DFG determine that adjusting the buffer size would not be likely to have adverse effects. No project activity will commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 6.5 acres of foraging habitat contiguous to the burrow will be preserved until the breeding season is over.

- If occupied burrows cannot be avoided, conduct on-site passive relocation techniques, approved by DFG, during the nonbreeding season to encourage owls to move to alternative burrows outside of the impact area. No burrows found by the survey to be occupied will be disturbed during the breeding season. After burrowing owls have been confirmed absent or removed from the site, the burrows may be destroyed.

Implementation of these mitigation measures would reduce the impact to a less-than-significant level.

Mitigation Measure 4.2-3: Impacts of Lethal Electrified Fence on Wildlife

CDCR will initiate coordination with USFWS and DFG regarding the proposed project and anticipated wildlife mortality and will take appropriate actions to minimize wildlife electrocutions to the extent feasible and compensate for unavoidable impacts on native wildlife species. It is anticipated that this would be accomplished using the tiered mitigation approach developed as part of the Statewide Electrified Fence Project, which includes the existing lethal electrified fences at CMC-E. Formal consultation with USFWS and DFG and permitting under ESA and CESA is not proposed because no federally listed or state-listed species or candidates for listing are considered at risk of electrocution. CDCR is committed to implementing the three tiers of mitigation outlined below to off-set potential adverse effects to birds protected under the MBTA and the California Fish and Game Code.

- *Tier 1:* The first tier of mitigation measures are those designed to eliminate or reduce wildlife attractants near the prison perimeter by implementing specific maintenance and operation procedures. By making the perimeter less hospitable, wildlife will frequent this area less often, thus reducing their exposure to accidental electrocution. Tier 1 maintenance and operation procedures will be developed specifically for the Estrella Facility and incorporated into a handbook and a training module to be used by CDCR staff when the proposed Estrella Facility becomes operational.

- *Tier 2:* Second-tier mitigation measures consist of both exclusion and deterrent devices. Tier 2 measures to be installed on the proposed lethal electrified fence include a vertical netting system and anti-perching devices. CDCR will install three-quarter-inch mesh vertical netting enveloping both sides of the lower section of the lethal electrified fence, which would otherwise present the greatest danger to wildlife species at risk of electrocution. Anti-perching wires, which consist of 2- to 4-inch pieces of stiff wire connected to an aluminum base, will be strategically attached to the tops of perching sites in and near the perimeter. Once installed, this wire will reduce the ability of birds to perch near the lethal electrified fence, thus reducing exposure to accidental electrocutions.

- *Tier 3:* The third tier includes mitigation to compensate for residual wildlife mortality impacts. CDCR will provide funds for implementation of a habitat enhancement, creation, and/or management project that would improve opportunities for reproductive success of birds likely to be adversely affected by the project. Mechanisms for implementation of the mitigation would be similar to those previously utilized by CDCR for the Statewide and Six Prison Electrified Fence Projects and may include additional funding for a project to which CDCR has already contributed as part of these existing projects. The mitigation could be implemented at federal, state, or private lands located anywhere in California if they support a large percentage of the species at risk of electrocution at the proposed Estrella Facility. The amount of funding contributed would depend on the acreage of habitat that would benefit from the mitigation. The mitigation acreage required would be determined based on the anticipated annual mortality of native birds and the area required supporting an equivalent number of individuals of the species at greatest risk of electrocution.

Implementation of this mitigation measure would reduce the impact to a less-than-significant level, because appropriate measures would be implemented to minimize impact to wildlife consistent with permit requirements.

4.3 CULTURAL RESOURCES

This section of the EIR includes an evaluation of the potential impacts on cultural resources that could result from construction under the Master Reuse Plan. Cultural resources may include archaeological traces such as early Native American occupation sites and artifacts, or historic-era buildings and structures. These materials can be found at many locations on the landscape and, along with prehistoric and historic human remains and associated grave-related articles, are protected under the provisions of CEQA.

4.3.1 EXISTING CONDITIONS

The overview of the prehistoric, ethnographic, and historic context of the CDCR property is based on both primary and secondary research. The various events and chronologies discussed below aid in the analysis of cultural resources identified in and adjacent to the project area.

PREHISTORIC SETTING

Fredrickson (1973, 1974) proposed a sequence of cultural patterns for the central districts of the North Coast Ranges, placing them in a framework of cultural periods that he believed were applicable to California as a whole. He proposed and utilized the concept of the cultural pattern as an adaptive mode shared in general outline by a number of analytically separable cultures. These different cultural modes could be characterized by similar technological skills and devices, similar economic modes, including participation in trade networks and practices surrounding wealth, and similar mortuary and ceremonial practices. Fredrickson argued that the dating and definition of particular patterns should be kept separate from temporal periods, given the coexistence of more than one cultural pattern operating at any particular time. Thus, his framework of prehistoric periods is based on general technological and cultural horizons in operation throughout California over appreciable lengths of time. The general elements of this framework are outlined below.

The **Paleo-Indian Period** (12,000–8000 years Before Present [B.P.]) saw the first demonstrated entry and spread of humans into California. Known sites are situated along lake shores and a developed milling tool technology may exist at this time depth. The social units were not heavily dependent on exchange of resources. Exchange activities occurred on an ad hoc, individual basis. Characteristic artifacts include fluted projectile points and flaked stone crescents. Traditionally, Paleo-Indians are viewed as exclusive big-game hunters. However, more recent research suggests that they pursued much more varied subsistence and economic systems than previously thought.

The beginning of the **Lower Archaic Period** (8000–5000 B.P.) coincides with the middle Holocene climatic change to generally drier conditions and the disappearance of the pluvial lakes that likely influenced earlier land-use patterns. Subsistence appears to have been focused on the consumption of plant foods as opposed to those obtained by hunting or trapping. Settlement appears to have been semisedentary, with little emphasis on wealth. Most tools were manufactured of local materials, and exchange remained on an ad hoc basis. Distinctive artifact types included large dart points and the milling slab and hand stones.

The **Middle Archaic Period** (5000–3000 B.P.) begins at the end of mid-Holocene climatic conditions, when the climate became similar to present-day conditions. Cultural change likely was, in part, a response to changing environmental conditions. Economies were more diversified, and possibly included the introduction of acorn-processing technology. Hunting remained an important source of food, as evidenced by faunal remains recovered from sites from this period. Populations appear to have grown, expanded into regions not previously settled, and became more sedentary; probably in response to the development of oak groves and the harvesting of acorns during the summer and fall seasons. Little evidence is present for development of regularized exchange relations. Artifacts diagnostic of this period include the bowl mortar and pestle, which first appear in the archaeological record during this time, and the continued use of large projectile points.

The growth of sociopolitical complexity marks the **Upper Archaic Period** (3000–1500 B.P.). The development of status distinctions based on wealth is well documented and group-oriented religions emerge. Some indications suggest that these may represent the origins of the Kuksu religious system at the end of the period. Exchange systems grew more complex with evidence of regular, sustained exchanges between groups. Shell beads gained in significance as possible indicators of personal status and as important trade items. During this period, large projectile points are still found in lithic assemblages, and the bowl mortar and pestle replace the milling stone and hand stone throughout most of the state.

Several technological and social changes distinguish the **Emergent Period** (500–200 B.P.). The bow and arrow were introduced during this period and ultimately replaced the dart and atlatl. Territorial boundaries between groups became well established and closely resemble those documented in the ethnographic literature. Distinctions in individual social status became increasingly linked to acquire material wealth. Exchange of goods between groups becomes more regularized with more material, including raw materials, entering into the exchange networks. In the latter portion of this period, exchange relations become highly regularized and sophisticated. The clam disk bead became a monetary unit for exchange, and increasing quantities of goods were moved greater distances. Craft specialization arose and individuals or groups of craft persons governed various aspects of production and exchange of trade goods in particular. It was towards the end of this period that sustained Euro-American contact with the ethnographic Southern Valley Yokuts (see below) began to drastically alter their traditional life-ways. Populations decreased dramatically as a result of introduced disease, armed conflict, and forced relocation; native culture was threatened with annihilation.

ETHNOGRAPHIC SETTING

Ethnographic data suggest that the project area is situated within the range of the Southern Valley Yokuts territory, although it may have also been used by neighboring Salinan groups. A comprehensive discussion of the range of Yokuts and Salinan groups can be found in Hampson et al. 1982, Wallace 1978, and Hester 1978.

Historically, the Native American groups living in and around the Paso Robles region are part of the Yokut tribe, specifically the Southern Valley Yokuts. They occupied an area extending from the lower Kings River to the Tehachapi Mountains and incorporated the Salinas River Valley. This region centered around Tulare, Buena Vista, and Kern Lakes and their associated perennial drainages and wetlands (Kroeber 1925:492, Wallace 1978:448). These waters provided an ideal habitat for a rich variety of wildlife and flora and enabled the Yokut people to exploit resources available in few other areas in the southern part of California. As a result of the accessibility of such food and material resources, the Southern Valley Yokuts were able to occupy permanent residences for most of the year. Such settlements included small, simple, oval single-family structures and larger, clan-oriented communal structures that housed 10 or more families (Wallace 1978:450–451). Many domestic activities, including food preparation, typically took place outside in shaded porch-like extension of the larger residences. Aside from the numerous floral and faunal resources available in their well-watered surroundings, the Yokut also maintained granaries, the bottoms of which were raised off the ground to limit the access of insects and mice and to prevent ground moisture from seeping into the stores. Dried fish and various roots, seeds, and grains were kept in these storehouses throughout the year (Wallace 1978:451).

Technologically, the Southern Valley Yokuts relied heavily on tule reeds gathered from nearby lake shores and marshes as a source of raw material for a wide variety of items including domestic structures, a canoe-like boat referred to as a “balsa” (Gayton 1948:21), baskets, water containers, arrows and many other articles. They relied on the tule reed in part because of the plentiful nature of this material and because wood and workable stone are not necessarily available in great quantities in the region.

Social organization among the Yokut was not unlike that of many other Native American groups in general. The biological nuclear family served as the basic domestic and economic unit, although a patrilineal totemic lineage was another key element in their social structure (Wallace 1978: 453). A totem symbol is an animal or bird species that members of that group were forbidden to eat or kill; the totem symbol was “transmitted” by a father

to his offspring. A maternal totem, on the other hand, did not pass between generations but was at least treated with respect between women and their husbands. Families sharing the same totem formed an exogamous lineage that did not have a formal leader nor retain any form of territorial rights. The lineage was primarily a mechanism for determining the transmission of individual status and performing specific ceremonial functions (Kroeber 1925:493, Wallace 1978: 453).

The Yokut language, of which there are some 22 dialects (Kroeber 1907:309–315, 1963:236–238), is a member of the California Penutian family of languages (Dixon and Kroeber 1919, Silverstein 1972) and is divided into two main groups: the Valley and Foothill divisions. These divisions and dialects, however, do not necessarily conform to the conventional cultural and geographical differentiation noted between Yokut groups. For example, tribes who were culturally more associated with the Foothill groups, apparently spoke some dialects more characteristic of northern Valley groups.

The names of individual Yokut groups, tribes, and tribelets that are used today derive from early Spanish sources and the interpretations and recordings of English speakers. Typically, non-Yokut peoples have approximated the sounds of the Yokut language and dialects. As a result, to a certain extent, the Yokut language as it is known today has been influenced particularly by Spanish, which has affected the pronunciation of a number of sounds and altered the structure (Beeler 1971:51–61, Wallace 1978:447).

The neighboring Salinan peoples shared many cultural traits with the Yokuts, although their language has been tentatively included in Hokan stock (Hester 1978:500). The Salinan peoples occupied a rugged, mountainous area on the south-central California coast, although the actual extent of their traditional territory is far from certain. Salinan and Yokuts groups appear to have maintained friendly relations, with Salinan groups frequently being allowed access to the interior lakes while the Yokuts often took advantage of coastal resources typically found within Salinan lands (Hester 1978:500).

Population estimates of Salinan peoples are difficult to extrapolate from early historic records. However, based in part on records of the Mission San Antonio de Padua, and Mission San Miguel records from the 1770s through the late 1790s, as many as 3,000 individuals may have claimed affiliation with this cultural group. However, by the early decades of the 19th century their population had dramatically decreased; this trend continued for another century (Cook 1943; Lewis 1910 in Hester 1978:501), with only 36 Salinans being documented on the California Roll in 1928. Today, however, the Salinan people are enjoying a population and cultural resurgence with the 600-member tribe enjoying status as a tribe recognized by the State of California (Salinan Tribe 2009).

Consistent interaction between the Southern Valley Yokuts and Europeans began to take place in the latter decades of the 18th century. Expeditions by military and church-sanctioned explorers into the region took place periodically in the 1770s, but more active incursions did not occur until the Spanish governor, Jose de Arrillaga, supported such activities during his administration from 1802 through 1814. The impetus for these expeditions was primarily to expand the power of the Spanish government and increase its influence in their tenuous New World Empire. However, the Spanish never fully succeeded in their dreams of total conquest, and for the most part Indian life in the region was not substantially affected (Cutter 1950:57, Wallace 1978:459).

HISTORIC-ERA SETTING

Early Settlement

The earliest documented European settlement in the region occurred when Spanish explorers began to colonize the area following the discovery of the California coast in 1769. Franciscan friars established a system of missions located 1 day's journey apart along the coast throughout the state. Within the vicinity of what is now Paso Robles, the San Miguel Mission was established and built by the Salinan Indians under the direction of the Spanish friars. Large deposits of warm mineralized water (artesian springs) were known to lie deep beneath the land, and had been utilized for their curative properties by the native population for many years. The area was named El Paso de

Robles (The Pass of the Oaks) by the Spanish who were occupying the region (Hobbs and Radford 2007:7; Thompson and West 1883:47).

In May 1844, not long after California became a Mexican territory, the Mexican governor of California, Manuel Micheltornena, granted 6 square leagues of land (25,993 acres) to Pedro Narvaez, establishing Rancho El Paso de Robles (Bowler 2003:8–9). Narvaez raised cattle and sheep on the rancho; however, raids by the local Indians hindered the property's profitability (Thompson and West 1883:47).

In 1845, Narvaez transferred title of the rancho to Petronilo Rios, a retired Mexican sergeant. Rios, along with an individual named William Reed (of the 1848 Mission San Miguel massacre), had earlier purchased Rancho San Miguel, although the United States government later invalidated their claim. Rios and his wife, Catarina, lived near the old mission San Miguel with their children for many years raising sheep, and selling liquor and other merchandise from their home (Bowler 2003:9; Ohles 2007:1). When California was admitted to the United States in 1850, the previously established Mexican land grants, including the one encompassing present-day Paso Robles, became subject to validation. Rios filed his petition for Rancho El Paso de Robles in 1852; however, it was not until July 1866 that President Andrew Jackson granted him clear title to the land. By that time Rios had already sold his interest in the property to Daniel and James Blackburn (Bowler 2003:10–11).

Blackburn Era—The Growth of a Town

The Paso de Robles rancho was bought by the Blackburn brothers and their friend Lazarus Godchaux in August 1857 for a sum of $8,000. The purchase included the 25,993 acres of land, the mineral hot springs, and a stagecoach stop that had been established on the property. Soon after their purchase of the rancho, the Blackburns undertook improvements to the property. The brothers divided the rancho—Daniel claimed 1 league (4,438 acres) of land, which included the hot springs. James and Godchaux claimed the remainder of the property, including the old adobe Casa de Paso de Robles (Bowler 2003:12; Thompson and West 1883: 374).

The Blackburns welcomed further settlement, and the mid to late 1800s saw the arrival of many industrious settlers to the area. One such individual, Dr. Faliaferro Johnson, purchased one league of land on the rancho. Dr. Johnson soon recognized the value of utilizing the hot springs and built the first true bathhouse in Paso Robles in 1864. The waters were viewed as a cure for everything from gout to female complaints; they were even seen as a relief from opium and morphine addiction (Hobbs and Radford 2007:7–9; Thompson and West 1883:370).

The popularity of the hot springs encouraged further regional growth and settlement. By 1861, a tri-weekly stage following the El Camino Real ran between San Francisco and Los Angeles carrying passengers and post. The stage, which was later taken over by Wells Fargo, had a regularly scheduled stop in Paso Robles (Bowler 2003:57).

In an effort to realize their dream of the community becoming a sophisticated destination, the Blackburns constructed the Hotel El Paso de Robles and developed a two-block park across the street from the hotel (Hobbs and Radford 2007:1–2). Historic maps show that the settlement's growth allowed for other hotels (the Central and the Wintroll), a post office, drug stores, and general mercantile stores. Also depicted is the Southern Pacific Railroad (SPRR), which was instrumental to the community's success. The SPRR traveled from Soledad to Paso Robles, allowing further trade for local farmers and ranchers who lived and worked on the outskirts of the settlement (Sanborn Maps 1888; Bowler 2003:57).

A townsite was laid out in 1886 and an auction held with prospective buyers brought in by train from San Francisco. More than 200 lots were sold during the auction (Bowler 2003: 57–58). By 1889, the city of El Paso de Robles incorporated, and the name was commonly shortened to Paso Robles (Hobbs and Radford 2007:7–8). The 1890 census showed the Paso Robles population at 827, and by 1900 the population increased to 1,224 (U.S. Census Paso Robles 1890–1900). To encourage further tourism, the town built a municipal bathhouse. The hot

springs remained a major tourist attraction, drawing celebrities and politicians, making the late 19th century the golden era for the town (Bowler 2003:57).

The passage of the California Highway Improvement Act in 1911 resulted in the El Camino Real thoroughfare being widened, paved, and renamed Highway 101. This highway traveled through Paso Robles near Spring Street. By 1920, cars were quickly becoming the preferred method of travel. Travelers traversing the vicinity often stopped in Paso Robles. The 1926 Sanborn map shows a substantial increase in town services, including cleaners, banks, and tailors.

From the early 20th century until the early 1940s, Paso Robles had a population of approximately 3,000 residents. World War II and the establishment of nearby Camp Roberts (1940) and the Estrella Army Air Base (1943) had an important influence on the town, more than doubling its population (Hobbs and Radford 2007:8). The late 1940s and early 1950s saw continued development of the town, including an increasing presence of light industry, as well as the founding of the Paso Robles School for Boys located immediately outside of town (Paso Robles Journal 1954:1). In the late 1950s a new highway (State Route 46) was built near the old Highway 101; service stations and accommodations were built near the new thoroughfare (Hobbs and Radford 2007:123). By 1957, the town boasted 25 hotels, two hospitals, six schools, an airport, and a daily newspaper (Polk's City Directory 1957). Gradually, sections of land east of the Salinas River, a former eastern boundary, were annexed to the city, resulting in further population growth. By the early 1990s, the population increased to 21,000 (Hobbs and Radford 2007:8). Over the years, the city has grown and developed considerably, but it retains a rural character.

El Paso de Robles Youth Correccional Facilita

The El Paso de Robles Youth Correctional Facility, originally known as the Paso Robles School for Boys, was founded in 1947 by the California Youth Authority (predecessor to the Division of Juvenile Justice [DJJ]) in response to a growing need for juvenile correctional facilities in the state. Preliminary studies conducted in 1943 under the auspices of the California Youth Authority recognized the need for three additional schools, one of which would be an intermediate school for boys between the ages of 15 and 17 (Paso Robles Journal 1954:1).

The Paso Robles School for Boys was located approximately 5 miles east of the town of Paso Robles, and situated upon a 200-acre site, part of the former World War II Estrella Army Air Base. Originally the school utilized the existing buildings and infrastructure on-site, which included 40 barracks buildings and a sewage disposal plant (Paso Robles Journal 1954:2). The school staff included a superintendent, business manager, and a chief engineer who laid plans for remodeling the existing buildings for reuse as a juvenile correctional facility (Paso Robles Journal 1954:2).

With the desire to develop an atmosphere of a "therapeutic community," a program of training and education was selected for the school. This philosophy utilized scientific empirical techniques for the "objective evaluation of causative factors and the application of corrective methods to counteract the unfavorable influences and compensate for their effects" (Youth Authority 1955:2–3).

The first wards of the school were received on transfer from the Fred C. Nelles School in Whittier on September 30, 1947. Over the next few years, the facility was expanded from the original capacity of 60 to 140 boys. The planning and development of a new facility was soon under way. Construction of the new facility commenced in May 1951. Contracts were staggered for various phases of work, which included four dormitories (1951), administration, services, culinary, shop, and power plant buildings (1952), and additional classrooms and dormitory buildings (1953). An auditorium was later planned for 1954 (Paso Robles Journal 1954:3).

Governor Goodwin J. Knight dedicated the new facility on Friday January 29, 1954. Included in attendance were several judges, legislators, state department directors, and then–Paso Robles Mayor Russell Gates (Youth Authority 1955:4). The facility closed permanently on July 31, 2008 (Division of Juvenile Justice 2009).

PREFIELD RESEARCH

Before the implementation of field surveys, a records search request was submitted by AECOM to the Central Coast Information Center (CCIC) of the California Historical Resources Information System. The records search consisted of reviews of previous investigations, maps, and archaeological site records from within and in the vicinity of the CDCR property. This research included but was not necessarily limited to a review of the following:

- *National Register of Historic Places* (National Park Service July 2009),
- *California Register of Historical Resources* (State of California 2009),
- California Points of Historical Interest (State of California),
- California Historical Landmarks (State of California),
- Directory of Properties in the Historical Resources Inventory (State of California),
- Historic Property Data File (State of California, Office of Historic Preservation),
- California Department of Transportation (CALTRANS) State and Local Bridge Inventory (State of California), and
- Survey of Surveys (CCIC).

The CCIC records search indicated that a total of eight cultural resource investigations have been completed for properties within and in the vicinity of the project area (Table 4.3-1). None of these studies resulted in the documentation of any prehistoric or historic-era sites, features, artifacts, or culturally sensitive properties. In addition, these investigations conducted archaeological surveys of large tracts in diverse settings including open farm fields and several drainages and creeks. No documented cultural resources were found, including along and in the vicinity of natural creeks, often highly sensitive settings for Native American occupation. Therefore, it would appear that the project area possesses a very low level of sensitivity for containing potentially significant cultural sites and materials.

Table 4.3-1
Cultural Resource Inventories within and in the Vicinity of the CDCR Property

Title	Author/Date	CCIC File No.	Location
Archaeological Component for the Facilities Plan Project Report—Cal. Youth Authority and Paso Robles Municipal Airport Wastewater Facilities	L. Spanne 1977	31	Outside CDCR property
Cultural Resources Evaluation, El Paso de Robles School	R. Hoover 1985	484	Within CDCR property
3100 Improvements, Los Robles Camp, Dozer Storage Building	B. Parker	2838	Within CDCR property
Cultural Resources Survey and Impact Assessment for the Huerhuero Golf Course Project in the City of El Paso de Robles, San Luis County, California	C.A. Singer 1996	3002	Outside CDCR property
Cultural Resources Survey and Impact Assessment for a 66-Acre Property on Dry Creek Road in the City of El Paso de Robles	C.A. Singer 1998	3394	Outside CDCR property
CDF Project Review Report for Archaeological and Historical Resources—Alamo CMP	B. Parker 2000	4016	Outside CDCR property
Cultural Resources Survey and Impact Assessment for a 39.1-Acre Property on Airport Rd. in the City of Paso Robles, San Luis Obispo County, California	C.A. Singer 2005	5555	Adjacent to and outside CDCR property
An Archaeological Survey at the Paso Robles Airport, San Luis Obispo County, California	T. Conway 2008	6170	Outside CDCR property

Notes: CCIC = Central California Information Center; CDCR = California Department of Corrections and Rehabilitation
Sources: CCIC 2009, data compiled by AECOM in 2009

FIELD SURVEY

In November 2009, AECOM cultural resources specialists conducted an intensive archaeological survey of the CDCR property. Much of the proposed Estrella site is presently developed, heavily graded and disturbed, and covered with manicured grass or other vegetation. As a result, ground visibility was limited at best, although erosion areas, dirt roadways and paths, rodent burrows and other disturbances often provided clear indications of the nature of below-surface soil conditions. No prehistoric or historic-era artifacts or darkened soil characteristic of early Native American habitation were noted.

A total of 19 buildings dating to the early to mid 1950s are located on the proposed Estrella site (see Table 4.3-2). In general, DJJ appears to have used somewhat standard building types and layout for the former DJJ facility and components have been altered and improved since the complex's initial construction.

The CAL FIRE facility is also developed, with the majority of area being covered in pavement. Four mid- to late 1940s buildings (administrative, warehouse, classroom, and crew lockup storage buildings) were constructed at an alternate location and subsequently relocated to the CAL FIRE facility in the 1970s. Each of these CAL FIRE buildings appears to either be commonly constructed temporary storage buildings or industrial-type buildings using readily available materials and designs. Further, these buildings were moved to their current location, which is typically considered to compromise the historic integrity of a historic resource should it represent a historic theme. The other buildings at each site are less than 50 years in age.

Table 4.3-2
Estrella Buildings More Than 50 Years in Age (Constructed Circa 1955–1956)

Administration
Admissions & Naciemento Cottage
Kitchen/Laundry Services Complex
Boiler Plant
Avenal Cottage
Los Osos West Cottage
Cayucos Cottage
Los Osos East Cottage
Nipomo Cottage
Morro Cottage
Chalome Cottage
San Simeon Cottage
Cambria Cottage
Auditorium/Chapel
Academic School
Gymnasium & Pool
Old Gymnasium
Staff Residences (2)

4.3.2 REGULATORY BACKGROUND

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws are applicable to the project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Public Resources Code, Section 5024.5

The following provisions included in Section 5024.5 of the California Public Resources Code are applicable to the project:

> (a) No state agency shall alter the original or significant historical features or fabric, or transfer, relocate, or demolish historical resources on the master list maintained pursuant to subdivision (d) of Section 5024 without, early in the planning processes, first giving notice and a summary of the proposed action to the officer who shall have 30 days after receipt of the notice and summary for review and comment.
>
> (b) If the officer determines that a proposed action will have an adverse effect on a listed historical resource, the head of the state agency having jurisdiction over the historical resource and the officer shall adopt prudent and feasible measures that will eliminate or mitigate the adverse effects. The officer shall consult the State Historical Building Safety Board for advice when appropriate.

California Environmental Quality Act

CEQA offers guidelines regarding impacts on historic and prehistoric cultural resources. CEQA states that if implementation of a project would result in significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered. However, only significant cultural resources need to be addressed. The State CEQA Guidelines define a significant historical resource as “a resource listed or eligible for listing on the California Register of Historical Resources” (CRHR) (Public Resources Code 5024.1). A historical resource may be eligible for listing on the CRHR if it:

1. is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or

2. is associated with the lives of persons important in our past; or

3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values; or

4. has yielded, or may be likely to yield, information important in prehistory or history.

The State CEQA Guidelines also require the consideration of unique archaeological sites (Section 15064.5). As outlined in the Public Resources Code (Section 21083.2), a "unique archaeological resource" is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that is meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site does not meet the criteria for inclusion in the CRHR but does meet the definition of a unique archaeological resource as outlined in the Public Resources Code (Section 21083.2), it may be treated as a significant historical resource. Treatment options under Section 21083.2 of CEQA include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation, or study in place without excavation and curation (if the study finds that the significant historical resource would not meet one or more criteria for defining a "unique archaeological resource).

For historic buildings, Section 15064.5(b)(3) of the State CEQA Guidelines indicates that a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Building*s, or the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource's physical identity that existed during its period of significance. Integrity is determined by considering the setting, design, workmanship, materials, location, feeling, and association of the resource.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

There are no local plans, policies, regulations, or ordinances pertaining to cultural resources that are applicable to the project.

4.3.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a cultural resources impact is considered significant if implementation of the proposed project would do any of the following:

- cause a substantial adverse change in the significance of a unique archaeological resource or a historical resource, as defined in Section 21083.2 of CEQA and Section 15064.5 of the State CEQA Guidelines, respectively; or
- disturb any human remains, including those interred outside formal cemeteries.

Section 15064.5 of the State CEQA Guidelines defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Project Impacts

Impact 4.3-1: Construction-Related Impacts on Documented Significant Cultural Resources

As discussed above, several historic-era (greater than 50 years in age) structures were observed at both the proposed Estrella Adult Correctional Facility (Estrella Facility) and the CAL FIRE facility. Implementation of the proposed project would likely result in the physical addition to the admissions cottage. The Master Reuse Plan would also result in the demolition of site features, including part of a rear-facing wing of the naciemento cottage and part of the academic school building, as well as the majority of CAL FIRE buildings. However, none of these aforementioned buildings meet CRHR criteria as significant cultural resources because preliminary information suggests that none of the buildings located either within the proposed Estrella Facility or the CAL FIRE facility are associated with important historic events or persons at the national, state, or local level. Additionally, the

buildings and structures located at the two facilities appear to be common and/or temporary construction types for the mid to late 20th century and thus do not appear to be notable architecturally. The results of the previously initiated consultation between the Office of Historic Preservation, CDCR, and CAL FIRE would formalize this assessment for the purposes of Public Resources Code Section 5024.5. Further, archival research and field investigations conducted by a qualified archaeologist did not document any cultural resources presently listed or potentially eligible for listing in the CRHR within the CDCR property, including the Estrella, CAL FIRE, and reentry sites.

Implementation of the Master Reuse Plan would not result in any impacts on any documented cultural resources presently listed or possibly eligible for listing in the CRHR because no resources are known to be present within the CDCR property and none of the historic-era structures within the CDCR property appear to be associated with important historic events or persons at the national, state, or local level. Consequently, this impact would be ***less than significant****. (Impact 4.3-1).*

Impact 4.3-2: Construction-Related Impacts on Presently Undocumented Cultural Resources

Although no cultural resources were documented within or in the immediate vicinity of the CDCR property, the CDCR property is situated in a region where CRHR-eligible prehistoric and historic-era cultural resources have been documented. Although no cultural resources are known to be present within the CDCR property (i.e., Estrella and CAL FIRE sites), such resources could be present in subsurface contexts that were not identifiable during the archaeological investigations.

Because the facilities proposed under the Master Reuse Plan would be located in an area where "unique" or "historical" resources (per CEQA criteria) could be encountered during project implementation, disturbances of such resources would constitute a ***potentially significant*** *impact (Impact 4.3-2).*

Impact 4.3-3: Construction-Related Impacts on Presently Undocumented Human Remains

Although no evidence for prehistoric or early historic-era interments was found on the CDCR property in surface contexts, this does not preclude the existence of buried human remains. California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and grave-associated items from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in Sections 7050.5 and 7052 of the California Health and Safety Code and Section 5097 of the California Public Resources Code. Construction activities associated with the Master Reuse Plan could potentially result in the disturbance of presently undocumented prehistoric or historic-era human remains.

Because construction activities associated with the Master Reuse Plan could potentially result in the disturbance of presently undocumented prehistoric or historic-era interments, human remains, and/or associated grave-related articles, this impact would be ***potentially significant*** *(Impact 4.3-3).*

4.3.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impact was identified as less than significant, and therefore no mitigation is required:

Impact 4.3-1: Construction Related Impacts on Documented Significant Cultural Resources

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as potentially significant or significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below.

Mitigation Measure 4.3-2: Impacts on Presently Undocumented Cultural Resources

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains) is made during construction activities at the Estrella, CAL FIRE, and reentry site, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the CRHR and will develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

Implementation of the above mitigation measure would reduce the impact to a less-than-significant level.

Mitigation Measure 4.3-3: Impacts on Presently Undocumented Human Remains

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, potentially damaging excavation in the area of the burial will be halted and the San Luis Obispo County Coroner and a professional archaeologist will be contacted to determine the nature and extent of the remains. CDCR Project Director shall also be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050[c]).

Following the coroner's findings, the State of California, CDCR contractor, an archaeologist, and the NAHC-designated Most Likely Descendant (MLD) will determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.

The State of California will ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. Assembly Bill (AB) 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall implement one or more of the following measures:

- record the site with the NAHC or the appropriate Information Center,
- utilize an open-space or conservation zoning designation or easement, and/or
- record a document with the county in which the property is located.

The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also reinter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Implementation of the above mitigation measure would reduce the impact to a less-than-significant level.

SIGNIFICANT IMPACTS THAT WOULD REMAIN SIGNIFICANT AND UNAVOIDABLE

No cultural resources impacts were identified as significant and unavoidable.

4.4 EMPLOYMENT, POPULATION, AND HOUSING

This section evaluates the potential employment, population, and housing impacts of the project, including effects on regional population and employment trends, regional housing supplies, and employment opportunities.

4.4.1 EXISTING CONDITIONS

The 160-acre project site is located in the northeastern area of the city of Paso Robles in San Luis Obispo (SLO) County, California. SLO County is adjacent to and south of Monterey County. The former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility (DJJ facility) closed in July 2008. Before its closure, the DJJ facility employed up to 379 people, most of whom resided in nearby communities, but some of whom lived as far away as San Diego to the south, Bakersfield to the east, and Cottonwood to the north. The majority of DJJ employees (85%) lived in SLO County, with the majority of those employees living in incorporated cities (i.e., 72%) (CDCR 2009). The study area for the Paso Robles Property Master Reuse Plan (Master Reuse Plan) is based on the distribution of former DJJ employees and their families because this is the best information available to aid in predicting where employees associated with Master Reuse Plan implementation would reside.

EMPLOYMENT

The employed civilian labor force, unemployment rates, and employment opportunities for the cities of Paso Robles, Atascadero, and the unincorporated towns of SLO County are briefly summarized below based on the most recent census information collected by the U.S. Census Bureau (Census) and California Employment Development Department (EDD) statistics. Published in 2009, census data for 2008 are based on the 2006–2008 American Community Survey 3-Year Estimates from data collected between January 2006 and December 2008.

San Luis Obispo County

In December 2009 the employed civilian labor force in SLO County was approximately 125,800 people (EDD 2010), and the unemployment rate was 9.4%. This unemployment rate was less than the statewide unemployment rate of 12.2%. Based on the Census's American Community Survey 3-Year Estimates (2006–2008) (Census 2009a), employment within the county was distributed among the following sectors: management and professional (35.7%); sales and office (25.2%); service (20.8%); construction, extraction, and maintenance (9.8%); production, transportation, and material moving (7.3%); and farming, fishing, and forestry (1.1%) (Census 2009a). (Note to reader: The percentages here and for the individual cities and communities described below do not add up to 100% as a result of rounding the percentages for each sector to the nearest 10th.)

City of Paso Robles

Based on the Census's American Community Survey 3-Year Estimates (2006–2008) (Census 2009b), in December 2008 the employed civilian labor force in Paso Robles was approximately 13,658 people, and the unemployment rate was 5.4%. Employment in Paso Robles was distributed among the following sectors: management and professional (25.8%); sales and office (23.4%); service (22.4%); construction, extraction, and maintenance (12.2%); production, transportation, and material moving (12.1%); and farming, fishing, and forestry (4.1%) (Census 2009b).

City of Atascadero

Based on Census data for the City of Atascadero (Census 2009c), in December 2008 the employed civilian work force in Atascadero was approximately 13,215 persons, and the unemployment rate was 6.1%. Employment in Atascadero was distributed among the following sectors: management and professional (38.6%); sales and office (28.5%); service (15.1%); construction, extraction, and maintenance (10.5%); production, transportation, and material moving (7.1%); and farming, fishing, and forestry (0.2%) (Census 2009c).

Unincorporated Town of Templeton

According to decennial U.S. Census data from 2000, the latest for which data are available, the employed civilian work force in Templeton was approximately 2,216 persons, and the unemployment rate was 3.4%. Employment in Templeton was distributed among the following sectors: management and professional (37.6%); sales and office (24.8%); service (16.7%); production, transportation, and material moving (10.3%); construction, extraction, and maintenance (9.9%); and farming, fishing, and forestry (0.6%) (Census 2000).

POPULATION

Regional Population

The decennial census reported that a total of 248,322 people were living in SLO County in 2000; 24,297 people were living in Paso Robles; 26,411 people in Atascadero; and 4,687 people in the unincorporated town of Templeton (Census 2000). In 2008, the Census's 2006–2008 American Community Survey 3-Year Estimates estimated populations of 262,238 people in SLO County (Census 2009a), 28,953 people in Paso Robles (Census 2009b), and 26,242 people in Atascadero (Census 2009c). The population of the unincorporated town of Templeton was not estimated for the Census's American Community Survey 3-Year Estimates (2006–2008), so it is not possible to estimate growth since 2000. By the year 2030, total population in SLO County is projected to exceed 316,600 people, an increase of approximately 22% from the year 2000 (CDOF 2007). Based on the SLO Council of Governments' high population projection, the county as a whole would grow at a compound annual growth rate of 0.82%, to a size of 336,174 people by the year 2035 (San Luis Obispo Council of Governments 2009:9). The high population projection was selected for this analysis because it was used by the SLO Council of Governments to assign the Regional Housing Need Allocation (RHNA) to the incorporated cities of Arroyo Grande, Atascadero, Grover Beach, Morrow Bay, Paso Robles, Pismo Beach, San Luis Obispo, and the unincorporated areas of the county. The maximum population growth scenario is divided into the income categories of "very-low," "low," "moderate," and "above moderate." Based on the available housing for those income levels in the cities and unincorporated areas of the county, the SLO Council of Governments allocates the number of types of housing units that the cities and unincorporated areas of the county should make available through the approval of redevelopment projects and new development. Therefore, the maximum-population-growth-rate scenario is the scenario by which the local and county agencies plan for growth.

As previously stated, 85% of the former DJJ employees lived primarily in communities throughout SLO County, with more than half living in Paso Robles. Table 4.4-1 presents the geographic distribution of former DJJ employees.

The population for the cities of Paso Robles and Atascadero and the unincorporated town of Templeton are briefly summarized below based on the most recent census information. Other locations are not considered because the number of employees who resided, and therefore would be expected to reside, in other communities is low.

City of Paso Robles

The population of Paso Robles increased from 24,297 people in 2000 to 28,953 people in the year 2008, an approximate increase of 17% (Census 2008). Approximately 51% of employees (close to 200) lived in Paso Robles when the former DJJ facility was closed. Using the SLO Council of Governments' high population projection, Paso Robles would grow at a compound annual growth rate of 1.33%, to a size of 42,350 people by the year 2035 (SLO Council of Governments 2009:9).

Table 4.4-1 Geographic Distribution of Former DJJ Employees		
City[1] Unincorporated Town[2]	2000 Population	Approximate Number/Percent of Former DJJ Employees Residing in a City or Unincorporated Town in the County and Outside of the County
Paso Robles	24,297	192 / (51)
Atascadero	26,411	57 / (15)
Templeton	4,687	21 / (6)
San Miguel	1,427	10 / (3)
Morro Bay	10,350	8 / (2)
San Luis Obispo	44,174	8 / (2)
Cambria	6,232	6 / (2)
Arroyo Grande	15,851	5 / (1)
Shandon	986	4 / (1)
Cayucos	2,943	3 / (1)
Pismo Beach	8,551	3 / (1)
Santa Margarita	47,214	3 / (1)
Los Osos	14,361	2 / (1)
Outside County	Not applicable	57 / (15)
Total		**379 / (102[3])**

Notes: DJJ = Division of Juvenile Justice
[1] **Boldface** indicates incorporated cities.
[2] Regular typeface indicates unincorporated towns.
[3] Does not add up to 100% due to rounding.
Sources: CDCR 2009, Census 2000

City of Atascadero

The population of Atascadero decreased in size from 26,411 people in 2000 to 26,242 people in the year 2008, an approximate decrease of 0.1% (Census 2008). Approximately 15% of employees (close to 60) lived in Atascadero when the former DJJ facility was closed. Using the SLO Council of Governments' high population projection, Atascadero would grow at a compound annual growth rate of 0.75%, to a size of 32,950 people by the year 2035 (SLO Council of Governments 2009:9).

Unincorporated Town of Templeton

The population of Templeton has not been estimated since the decennial census. In 2000, 4,687 people lived in Templeton (Census 2000). Approximately 5% of employees (just over 20) lived in Templeton when the former DJJ facility was closed. Using the SLO Council of Governments' high population projection, Templeton would grow at a compound annual growth rate of 1.11%, to a size of 7,125 people by the year 2035 (SLO Council of Governments 2009:9).

HOUSING

The California Department of Housing and Community Development (CDHCD) defines a housing shortage as a vacancy rate of less than 5%. The vacancy rate is the percentage of total owner-occupied residential units that are for sale and not occupied. Data on housing availability and vacancy rates for the county, the cities of Paso Robles and Atascadero, and the unincorporated town of Templeton are provided below. The Census data exclude residential units that are not occupied and not for sale from the vacancy rate calculation; therefore, the number of

vacant residential units that are not occupied and for sale is reported and the number of residential units that are not occupied and not for sale is not reported.

San Luis Obispo County

In 2008, the county had an estimated total of 115,617 housing units (Census 2009a). Of these units, 102,686 were occupied and 12,921 were vacant for sale, for a vacancy rate of 11.1% (Census 2009a). According to the CDHCD definition, there was a net surplus of housing in the county. The median price for owner-occupied units in the county was $562,900 (Census 2009a).

City of Paso Robles

In 2008, Paso Robles had an estimated total of 11,589 housing units. Of these units, 10,975 were occupied and 614 were vacant for sale, for a vacancy rate of 5.3% (Census 2009b). Therefore, according to the CDHCD definition, there was a small housing surplus in the city. The median price for owner-occupied units in the city was $452,000 (Census 2009b).

City of Atascadero

In 2008, Atascadero had an estimated total of 10,997 housing units. Of these units, 10,284 were occupied and 713 were vacant for sale, for a vacancy rate of 6.5% (Census 2009c). This is considered a net surplus of housing in Atascadero. The median price for owner-occupied units in the county was $481,000 (Census 2009c).

Unincorporated Town of Templeton

In 2000, there were a total of 1,588 housing units in Templeton. Of these units, 1,548 were occupied and 40 were vacant for sale. This is considered a shortage of housing in Templeton because the vacancy rate is less than 2.6%. The median price for owner-occupied units was $219,500.

4.4.2 Regulatory Background

There are no federal, state, or local employment, population, or housing plans, policies, regulations, laws, or ordinances that are applicable to the project.

4.4.3 Environmental Impacts of the Project

Thresholds of Significance

Population and employment growth associated with implementation of the Master Reuse Plan would not, in and of itself, result in significant environmental impacts. However, this growth could result in significant impacts in the communities where the growth occurs, through the construction of housing and increased demand for community services. These secondary effects could result in significant environmental impacts and are appropriately addressed in other sections (e.g. public services, utilities) of this DEIR.

The discussion of employment, population, and housing impacts focuses on where project-related employees and their families would reside, the removal of existing housing, and availability of housing supplies for new employees, their families, and other potential new residents in the area.

Based on Appendix G of the State CEQA Guidelines, an employment, population, and housing impact is considered significant if implementation of the proposed project would do any of the following:

- induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or infrastructure);
- displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Project Impacts

Impact 4.4-1: Construction and Operational Population Growth Impacts

Implementation of the Master Reuse Plan would generate demand for approximately 375 construction workers (125 workers for the reentry facility and 250 workers for the Estrella and CAL FIRE facilities). Approximately 9.8% of the total workforce in SLO County is in construction, extraction, and maintenance and 7.3% is in production, transportation, and material moving. The total labor force in the county was approximately 138,800. Approximately 12.2% of the total workforce in Paso Robles is in construction, extraction, and maintenance and 12.1% is in production, transportation, and material moving. The total employed labor force in the city was approximately 13,658 people. The county's construction labor force is 23,874 people, and of this approximately 3,319 construction personnel are located in Paso Robles. The Master Reuse Plan would result in demand for approximately 1.6% of the construction labor force in SLO County and 11.3% for Paso Robles. This demand for construction personnel would be temporary, lasting approximately 28 months. Further, it is expected that the time of peak construction demand would be limited to 6–9 months of the 28-month construction period. Therefore, implementation of the Master Reuse Plan would not result in substantial demand for available construction personnel.

CDCR would employ up to 998 employees (365 staff for the reentry facility, 601 staff for Estrella, and 32 staff for the CAL FIRE facility). Based on the average household size of 3.03, implementation of the Master Reuse Plan could result in a population increase of 3,024 people throughout the county and surrounding communities. Table 4.4-2 shows the projected distribution of employees and their families, based on the former DJJ facility's historic distribution pattern.

Implementation of the Master Reuse Plan would result in approximately 1,542 new residents in Paso Robles. The remaining employees and their families would be distributed throughout other adjacent and outlying communities (e.g., Atascadero, Templeton, San Miguel). The population growth in the city that would result from implementation of the Master Reuse Plan (i.e., 1,542 residents) would account for approximately 5% of the projected population of the city. This growth is within the population growth estimates the City of Paso Robles (City) has planned for in its general plan, and the City is actively considering new projects that would house an expanded population base. Further, the vacancy rate for Paso Robles is sufficient (i.e., 5.3%) to accommodate this expected growth without new development. Therefore, the growth generated by the Master Reuse Plan would not be substantial in relation to the total population planned for by the City.

Implementation of the Master Reuse Plan would not result in growth that would exceed or be a substantial percentage of total population growth planned for by SLO County or the City of Paso Robles. Therefore, this impact would be ***less than significant*** *(Impact 4.4-1).*

Table 4.4-2 Geographic Distribution of Employees and their Families Under the Master Reuse Plan	
City[1]/Unincorporated Town[2]	Approximate Number/(Percent of Potential Residents under the Master Reuse Plan) (3,024 residents) Distributed by City, Unincorporated Towns in the County, and Out of County
Paso Robles	1,542 / (51)
Atascadero	454 / (15)
Templeton	181 / (6)
San Miguel	91 / (3)
Morro Bay	60 / (2)
San Luis Obispo	60 / (2)
Cambria	60 / (2)
Arroyo Grande	30 / (1)
Shandon	30 / (1)
Cayucos	30 / (1)
Pismo Beach	30 / (1)
Santa Margarita	30 / (1)
Los Osos	30 / (1)
Outside County	454 / (15)
Total	**3,082[3] / (102[4])**

Notes:
[1] **Boldface** indicates incorporated cities.
[2] Regular typeface indicates unincorporated towns.
[3] Difference from the estimated population increase caused by rounding.
[4] Does not add up to 100% due to rounding.
Sources: CDCR 2009

Impact 4.4-2: Direct and Indirect Population and Housing Impacts from the Master Reuse Plan

The Master Reuse Plan would result in the provision of 1,630 inmate beds. The inmates would be isolated from the surrounding communities. Therefore, the increased number of inmates would not directly affect nearby communities from a population or housing perspective.

During the comment period for the project's notice of preparation, concerns were raised that families of inmates would move into a community of an incarcerated inmate. CDCR prepared a study of the potential impacts of prisons on property values and crime rates, as well as various social and fiscal impacts resulting from inmate families relocating near prisons to be near inmates (CDCR 2008b). Through surveys, the study identified the percentage of inmates' family members living in the counties and cities hosting specific prisons who moved specifically to be near an inmate. The study also identified any abnormal fiscal or social impacts derived from their presence. Overall, the study found that the ratio of people who might have moved to be near an inmate is less than 0.5% of the total inmate population. In addition, although the sample size of visitors was limited, the results indicate that most of the inmate family members are employed or people of retirement age (CDCR 2008b:5). The study concluded that because the number of inmate families that move to be near an inmate is small, the fiscal and social impact of such families is also presumably small (CDCR 2008b:5). What the study could not address is the presumption that families of inmates have a greater propensity for crime than the existing population. No evidence exists to determine a conclusion. However, it is a logical presumption that a family that would move to

be closer to an inmate who is in the Estrella or reentry facility would do so to support the inmate and provide family support. A connection between this type of action and increases in crime cannot be drawn.

The CDCR study concluded that the location of prisons within communities does not adversely affect property values or crime rates, that a very small number of families move to be near an inmate, and that no evidence exists that such families are more prone toward criminal behavior than the population at large.

*Based on studies of other similar facilities, implementation of the Master Reuse Plan would not result in the relocation of substantial numbers of families of inmates to the project area. Therefore, **less-than-significant** direct and indirect population and housing impacts would occur with implementation of the Master Reuse Plan (Impact 4.4-2).*

Impact 4.4-3: Construction and Operational Housing Impacts

Construction of the Master Reuse Plan would not result in the removal of any existing housing. Although some housing units are located on the CDCR property, this housing would not be removed. As described under Impact 4.4-1, implementation of the Master Reuse Plan would not result in significant population and employment impacts.

Under the Master Reuse Plan, a total of 998 people would be employed, which could result in an increase in the local population of 3,052 people, under the conservative assumption that all employees and their families would relocate to SLO County from out-of-county areas. Although the population growth itself would not cause impacts on the physical environment, this growth could have socioeconomic consequences. Population and employment growth would be considered positive by some people and less so by others. Secondary effects, for example increased demand for housing that results in new development projects, improvements to public utilities infrastructure, and public services facilities, would require local agencies to evaluate the significance of potential environmental impacts.

Assuming that each new employee represents one household, implementation of the Master Reuse Plan has the potential to result in a demand for 998 residential dwelling units. Based on the population distribution shown above in Table 4.4-1, implementation of the Master Reuse Plan could result in a demand of an estimated 509 (51%) housing units in Paso Robles, 150 (15%) housing units in Atascadero, 60 (6%) housing units in Templeton, and 299 (30%) housing units throughout other communities.

In 2008, the average vacancy rate in Paso Robles was 5.3%, for an average number of 614 vacant dwelling units. During the same period the vacancy rate in Atascadero was 6.5%, totaling 713 vacant units, and 40 vacant units in Templeton. In the county overall, the average vacancy rate was 11.1% with a total of 12,921 vacant units.

The existing vacant units within SLO County and surrounding communities could sufficiently meet the housing needs of CDCR staff. Further, the City is considering several development applications that would result in the construction of new housing units (see Chapter 5, “Cumulative Impacts”). Although no housing shortfalls currently exist, with implementation of the Master Reuse Plan, the local available (vacant) housing stock may be reduced, but it is speculative to determine how and where this would occur. Because sufficient housing is available in the county, it is likely that employees would redistribute themselves in a manner consistent with available housing stock. Finally, the Master Reuse Plan would not induce new housing construction because it is consistent with the population estimates and land use plans of the local and county land use planning agencies. Further, local agencies have plans and projects in place to implement new housing to accommodate future growth. Refer to Section 5.5, ‘Cumulative Impacts’, of this EIR, for a discussion of the project’s potential cumulative contribution to housing projects currently proposed in the area.

*Because the region offers a large vacant housing base in addition to planned future housing growth, implementation of the Master Reuse Plan would not substantially decrease the available housing stock in surrounding communities and would not result, in and of itself, in the construction of substantial new housing in the study area. This impact would be **less than significant** (Impact 4.4-3).*

4.4.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

All of the Master Reuse Plan's population and housing impacts were identified as less than significant, and therefore no mitigation is required.

4.5 GEOLOGY AND PALEONTOLOGY

This section provides setting information and impact analyses related to geology, seismic safety, soils, and paleontology.

4.5.1 EXISTING CONDITIONS

REGIONAL GEOLOGIC SETTING

The 160-acre project site is located in the northeastern area of the Salinian Domain, a subdivision of the Coast Range's geomorphic province (Tetra Tech 2009:2). The Coast Range's geomorphic province consists of several elongate northwest-trending mountain ranges and narrow valleys that are approximately parallel to the coast of California. Rock units within the Coast Ranges geomorphic province consist of Mesozoic (245–65 million years ago) to Cenozoic (65 million years ago to present) igneous, metamorphic, and sedimentary rocks. The rock units are overlain by a variety of surficial geologic units of Quaternary age (1.8 million years ago to present). Late Pleistocene (2.6 million to 10,000 years ago) to early Holocene underlies the CDCR property site. These sediments consist of older river terraces of dissected alluvial gravels and sands (Wallace-Kuhl & Associates 2010:5). The Salinian Domain is characterized by granitic and crystalline metamorphic basement rocks overlain late Tertiary (65 million to 1.8 million years ago) and Quaternary age (12,000 years ago to present) sediments (Tetra Tech 2009:2).

LOCAL GEOLOGIC SETTING

The CDCR property is located on the U.S. Geological Survey (USGS) Paso Robles 7.5-Minute Quadrangle (Township 26 South, Range 12 East, Section 14). The site's topography is gently rolling. The CDCR property drains from the north and south to the center of the site. The average elevation is 790 feet above mean sea level. Soils mapped on the site are Arbuckle–San Ysidro complex, 2% to 9% slopes; Hanford and Greenfield gravelly sandy loams, 0% to 2% slopes; Hanford and Greenfield gravelly sandy loams, 2% to 9% slopes; and San Ysidro loam, 0% to 2% slopes (National Resources Conservation Service 2008).

A geotechnical report (Wallace-Kuhl & Associates 2010) was prepared to address geotechnical conditions on the reentry site. The scope of the investigation included site reconnaissance, literature review, and collection of soils data from 14 borings distributed throughout the reentry site. The investigation also included laboratory analysis of soil samples and evaluation of the field and laboratory data.

Borings conducted by Wallace-Kuhl & Associates encountered surface and near-surface soils consisting of silty sands and sandy silts to the maximum depth explored of approximately 40 feet below the surface grade. At four different locations, a discontinuous layer of silty clay ranging from 1 foot to 4 feet thick was encountered at approximately 1–2 feet below the surface grade. Dense and variably cemented soil was encountered at depths of roughly 3–5 feet below existing site grades.

SEISMICITY AND RELATED ISSUES

The geotechnical report for the reentry site (Wallace-Kuhl & Associates 2010) documented general geology, faulting, and seismicity data for the CDCR property and vicinity, as well as specific information on regional faulting, seismic activity, and potential ground acceleration associated with seismic events. The findings of the report are described below.

No indication of surface rupture or fault-related surface disturbance was observed at the 160-acre site. The Safety Element of the *City of Paso Robles General Plan* (2003:Figure S-2) does not indicate any active, potentially active, or inactive faults in the vicinity of the CDCR property. The site is not located in a designated Alquist-Priolo Earthquake Fault Zone (see "Alquist-Priolo Earthquake Fault Zoning Act" under "State Plans, Policies,

Regulations, and Laws," below). The nearest Alquist-Priolo Fault Zone is the San Andreas Fault, located approximately 18.6 miles northeast of the site. The nearest fault exhibiting Holocene activity, that is, activity within the last 11,000 years, is the San Andreas Fault (Wallace-Kuhl & Associates 2010:8).

Faulting and Surface Rupture

The CDCR property is located near several faults that are capable of generating significant earthquake ground motions. California Geological Survey Class A and Class B fault sources with moment magnitudes (M_W) of 6.5 or greater located within approximately 100 kilometers (62 miles) of the site are listed in Table 4.5-1. The nearest of these faults, the Rinconada Fault, trends northwest to southeast and is located approximately 5 miles southwest of the site. Disregarding Class A and Class B ratings, the closest fault to the site is the northwest-southeast–trending pre-Quaternary La Panza Fault. The La Panza Fault is located approximately 2.5 miles south of the site.

Table 4.5-1
Class A and Class B Faults Near the Site

Fault Name	Miles from the Site	Seismology Parameters	
		Maximum Magnitude (M_W)	Fault Type
Rinconada	4.8	7.5	rl-ss
San Andreas–Parkfield	18.6	6.5	rl-ss
San Juan	19.8	7.1	rl-ss
San Andreas–Cholame M-1c-1	20.4	7.3	rl-ss
San Andreas–1857 Rupture M-2a	20.4	7.8	rl-ss
San Andreas–Cho-Moj M-1b-1	20.4	7.8	rl-ss
San Andreas Whole M-1a	20.4	8.0	rl-ss
Los Osos	26.6	7.0	r
Hosgri	27.4	7.5	rl-ss
San Luis Range (S. Margin)	28.3	7.2	r
Great Valley 13	36.7	6.5	r
San Andreas–Carrizo M-1c-2	50.3	7.4	rl-ss
Casmalia (Orcutt Frontal Fault)	50.8	6.5	r
Lions Head	54.0	6.6	R

Notes: rl = right-lateral, r = reverse, ss = strike-slip
Source: Wallace, Kuhl, and Associates 2010

Ground Acceleration

Based on present knowledge of the geologic conditions within the 160-acre site, the primary effect of seismic activity would be some degree of ground motion resulting from activity on nearby faults. The most severe ground motion would be expected to occur if there were substantial activity along the San Andreas Fault zone. Based on the 2007 edition of the California Building Code (CBC) and Chapter 11 of the American Society of Civil Engineers (ASCE) 7-05, "Seismic Design Criteria," the site parameters may be determined based on the latitude and longitude of the site using the public domain computer program developed by USGS. Based on location from

the San Andreas Fault Zone and adjusted for soil types onsite, ground acceleration relative to gravity (*g*) at the Earth's surface given the maximum credible earthquake would be 1.21*g* for a short period quake of 0.2 second and 0.81*g* for a 1.0-second period temblor (Wallace-Kuhl & Associates 2010). These values are used to determine the seismic design parameters for new construction.

Liquefaction and Lateral Spreading

Liquefaction can occur when loose to medium dense, granular, saturated soils, generally located within 50 feet of the surface, are subjected to ground shaking. Groundwater was not encountered in 40-foot-deep borings. Water was measured at a level of 25–30 feet below the surface grade at a shallow well and at a depth of 40–50 feet below the surface grade at a deep well. The 160-acre site is underlain by sandy silt and silty sand. Based on the site's soil and groundwater conditions, the soils underlying the site are not considered liquefiable (Wallace-Kuhl & Associates 2010:8).

MINERALS

The CDCR property is not located within a mineral extraction zone (San Luis Obispo County GIS data 2010).

SOILS

Portions of the CDCR property have been modified from a native condition by grading for construction of the existing facilities. The remaining land cover is natural. Native soil types on the CDCR property are identified in Table 4.5-2. Approximately 23% of the soils on the CDCR property are classified as Arbuckle–San Ysidro complex; 2% and 3% of the site, respectively, are Hanford and Greenfield gravelly sandy loams, 0% to 2% slopes and Hanford and Greenfield 2% to 9% slopes; and approximately 72% are classified as San Ysidro loam. As shown in Exhibit 4.5-1, the San Ysidro loam soils are located on the east side of the CDCR property, with the Hanford and Greenfield gravelly sandy loams in the northeast and southeast corners separated by a band of the Arbuckle–San Ysidro complex. Soils on the CDCR property are considered suitable for construction with the exception of the San Ysidro soils, which have a high shrink/swell potential and low strength.

Table 4.5-2
Soils Data for the CDCR Property

Name	Erosion Hazard	Drainage	Permeability	Shrink/Swell Potential	Rate of Runoff
106 Arbuckle–San Ysidro complex	Slight	Moderately well drained	Moderately slow to very slow	High	Medium
149 Hanford and Greenfield gravelly sandy loams, 0% to 2% slopes	Slight	Well drained	Moderately Rapid	Low	Slow
150 Hanford and Greenfield gravelly sandy loams, 2% to 9% slopes	Slight	Well drained	Moderately Rapid	Low	Moderate
197 San Ysidro, 0% to 2% slopes	Slight	Moderately well drained	Very slow	High	Slow

Source: NRCS 2008

Source: SSURGO 2008, adapted by AECOM 2010

Soils Map **Exhibit 4.5-1**

Expansive Soils

The plasticity index (PI) of the soil provides an indication of how much clay will shrink or swell. The higher the PI, the greater is the shrink-swell potential. Soils with low expansion potential have a PI of 0-15%, medium expansion potential soils have a PI of 15-25%, and high expansion soils have a PI of 25% and above. Based on the results of the field investigation, the surface and the near-surface soils consist primarily of silty sand and silty sands and are considered relatively nonexpansive. However, the discontinuous layer of silty clay possesses a medium expansion potential.

PALEONTOLOGICAL RESOURCES

Inventory of Paleontological Resources

Geologic maps and reports covering the geology of the CDCR property and vicinity were reviewed to determine the exposed rock units and to delineate their respective areal distributions. In addition, published and unpublished geological and paleontological literature was reviewed to document the number and locations of rock units exposed on and near the CDCR property, previously recorded fossil sites from those rock units, and the types of fossil remains each rock unit has produced.

Criteria for Assessing Paleontological Resources

The potential paleontological importance of the CDCR property can be assessed by identifying the paleontological importance of exposed rock units within the CDCR property. Because topographic maps can easily delineate the areal distribution of a rock unit, this method can be used to delineate parts of the CDCR property that are of higher and lower sensitivity for paleontological resources or that may require monitoring during construction.

A paleontologically important rock unit is one that is rated high in potential paleontological productivity and is known to have produced unique, scientifically important fossils. A rock unit exposed at the CDCR property is rated for potential paleontological productivity based on the abundance and densities of fossil specimens and/or previously recorded fossil sites in exposures of the unit on and near the site. Exposures of a specific rock unit at the CDCR property are most likely to yield fossil remains representing particular species in quantities or densities similar to those previously recorded from the unit on and near the CDCR property.

An individual vertebrate-fossil specimen may be considered unique or significant if it is identifiable and well preserved and if it is one of the following:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) in which other species are also identifiable, and important information can be drawn about the life history of individuals;
- a skeletal element different from, or a specimen more complete than, those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The following tasks were completed to establish the paleontological importance of each rock unit exposed at or near the CDCR property:

- The potential paleontological productivity of each rock unit was assessed, based on the density of fossil remains previously documented within the rock unit.

- The potential for a rock unit exposed at the CDCR property to contain a unique paleontological resource was considered.

Inventory of Paleontological Resources and Assessment by Rock Unit

Assessing the fossils of vertebrate mammals has helped researchers to determine the relative age of sedimentary deposits in alluvial fans like those at the CDCR property. Mammals inhabiting the Pleistocene alluvial fan and floodplain included mammoths, horses, mastodons, camels, ground sloths, and pronghorns.

The Pleistocene epoch, known as the "great ice age," began approximately 1.8 million years ago. Surveys of fossils of late-Cenozoic land mammals in California have been provided by Hay (1927), Lundelius et al. (1983), and Jefferson (1991a, 1991b). Occasionally vertebrate marine fossils such as whale, porpoise, seal, or sea lion can be found in marine rock units such as the Miocene Monterey Formation and the Pliocene Sisquoc Formations known to occur throughout Central and Southern California. Vertebrate fossils of continental material are usually rare, sporadic, and localized (San Luis Obispo County 2009:A4.9). Scattered vertebrate remains (mammoth, mastodon, horse, ground sloth, camel, and rodents) have been identified from the Pleistocene nonmarine continental terrace deposits on Vandenberg Air Force Base to the south (San Luis Obispo County 2009:A4.9).

4.5.2 REGULATORY BACKGROUND

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

In October 1977, the U.S. Congress passed the Earthquake Hazards Reduction Act (Public Law 95-124) to reduce the risks to life and property from future earthquakes in the United States. The act established the National Earthquake Hazards Reduction Program (NEHRP). This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act (NEHRPA) (Public Law 101-614), which refined the description of agency responsibilities, program goals, and objectives.

The mission of the NEHRP is to improve understanding, characterization, and prediction of hazards and vulnerabilities; improve building codes and land use practices; reduce risk through post earthquake investigations and education; develop and improve design and construction techniques; improve mitigation capacity; and accelerate the application of research results. The NEHRPA designates the Federal Emergency Management Agency as the program's lead agency and assigns several planning, coordinating, and reporting responsibilities. Other NEHRPA agencies are the National Institute of Standards and Technology, National Science Foundation, and USGS.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act (California Public Resources Code, Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The law's main purpose is to prevent the construction of such structures on the surface trace of active faults. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as "earthquake fault zones" around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected state agencies, counties, and cities for their use in planning efforts. Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Sections 2690–2699.6) addresses earthquake hazards from nonsurface fault rupture, including liquefaction and seismically induced landslides. The act established a mapping program for areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards. The act also specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

National Pollutant Discharge Elimination System Permit

In California, the State Water Resources Control Board administers regulations issued by the U.S. Environmental Protection Agency (Title 55, Section 47990 of the Code of Federal Regulations [55 CFR 47990]) that require stormwater-generated pollution to be permitted under the National Pollutant Discharge Elimination System (NPDES). In turn, the board's jurisdiction is administered through nine regional water quality control boards. Under these federal regulations, an operator must obtain a general permit through the NPDES Stormwater Program for all construction activities that would disturb 1 acre or more. The general permit requires the operator to implement best management practices (BMPs) to reduce sedimentation into surface waters and control erosion. One element of compliance with the NPDES permit is preparation of a storm water pollution prevention plan (SWPPP) that addresses control of water pollution, including sediment, in runoff during construction. Because the project would involve ground disturbance in excess of 15 acres, an NPDES permit would be required with the associated SWPPP to ensure that the disturbance of silty sands on the site do not cause them to erode into down gradient waterways during storm events (see Section 4.7, "Hydrology and Water Quality," for more information about the NPDES and SWPPPs).

California Building Standards Code

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations, Title 24). The California Building Standards Code is based on the Uniform Building Code, which is used widely throughout the United States and has been modified for California conditions with numerous more detailed and/or more stringent requirements.

The California Building Standards Commission coordinates, manages, adopts, and approves building codes in California. In July 2007, the commission adopted and published the 2006 International Building Code as the 2007 California Building Code (CBC). This new code became effective on January 1, 2008, and updated all the subsequent codes under Title 24 of the California Code of Regulations.

The state earthquake protection law (California Health and Safety Code, Section 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum requirements for seismic safety and structural design are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design.

Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Appendix J of the 2007 CBC regulates grading activities, including drainage and erosion control, and construction on unstable soils, such as expansive soils and areas subject to liquefaction.

Local Plans, Policies, Regulations, and Ordinances

No local plan, policy, regulation, or ordinance applies to the Paso Robles Property Master Reuse Plan (Master Reuse Plan) because proposed facilities are entirely within state property and none of the proposed activities would interfere with the implementation of the city's plans, policies, regulations, and ordinances adopted for the safe and orderly development of the city.

PROFESSIONAL PALEONTOLOGICAL STANDARDS

No federal, state, or local plans, policies, regulations, or ordinances related to paleontological resources are applicable to the proposed project.

The Society of Vertebrate Paleontology (SVP) (1995, 1996), a national scientific organization of professional vertebrate paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. Most practicing professional paleontologists in the nation adhere to the SVP assessment, mitigation, and monitoring requirements, as specifically spelled out in its standard guidelines. The criteria in the SVP guidelines for determining sensitivity of paleontological resources are described below under "Significance Criteria."

4.5.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

Geology

Based on Appendix G of the State CEQA Guidelines, a geologic impact is considered significant if implementation of the proposed project would do any of the following:

- expose people or structures to potential substantial adverse effects including loss or injury from seismic hazards, including earthquake fault rupture, strong seismic ground shaking, liquefaction, or landslides;
- result in substantial soil erosion or loss of topsoil;
- be located on a geologic unit that is unstable or would become unstable as a result of the project;
- be located on expansive soil;
- have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available; or
- result in the loss of availability of known mineral resources that would be of future value to the region.

Paleontological Resources

In its standard guidelines for assessment and mitigation of adverse impacts on paleontological resources, the SVP (1995) established three categories of sensitivity for paleontological resources: high, low, and undetermined. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys and mapping are performed to determine their sensitivity. After reconnaissance surveys, observation of exposed cuts, and possibly subsurface testing, a qualified paleontologist can determine whether the area should be categorized as having high or low sensitivity. In keeping with the significance criteria of the SVP (1995), all vertebrate fossils are generally categorized as being of potentially significant scientific value.

Based on Appendix G of the State CEQA Guidelines, a paleontological impact is considered significant if implementation of the proposed project would directly or indirectly destroy a unique paleontological resource or site. For the purposes of this DEIR, a unique resource or site is one that is considered significant if it is identifiable and well preserved, and it is one of the following:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) in which other species are also identifiable, and important information can be drawn about the life history of individuals;
- a skeletal element different from or a specimen more complete than those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates are generally common; their fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare.

Issues Not Discussed Further

Because of the site's generally low topographic relief, and because grading the CDCR property would not create unstable slopes, land sliding is not expected to occur. This issue is not evaluated further in the DEIR.

No sources of potential volcanic hazards exist within the project vicinity and the CDCR property is some distance from any large body of water, so the site would not be exposed to potential tsunami or seiche hazards. These issues are not evaluated further in the DEIR.

Because the proposed project would provide wastewater treatment via a public sewer system, the use of septic tanks or alternative wastewater disposal systems would not be necessary; therefore, there would be no impact, and this issue is not discussed further in this DEIR.

Because the CDCR property is not located in an extraction zone, there would be no impact related to loss of mineral resources. This issue is not discussed further in this DEIR.

Project Impacts

Impact 4.5-1: Impacts from Seismic Hazards

New development could be exposed to ground shaking associated with earthquakes occurring on more distant fault systems, the closest of which is approximately 20 miles west of the CDCR property. Project design and construction would conform to the CBC Title 24 that contain specific design requirements to reduce damage from strong seismic ground shaking (Table 4.5-2). As a result, the potential hazards to people or structures from strong seismic ground shaking would be less than significant. Based on the site's soil (dense, variably cemented) and groundwater conditions, the soils underlying the site are not considered liquefiable (Wallace-Kuhl & Associates 2010:9). For the same reason (i.e., dense and cemented soils), the potential for lateral spreading of creek banks and other embankments is considered low. Therefore, impacts related to damage from seismic activity would be less than significant.

Because facility design and construction would be required by law to conform to the CBC and other local planning regulations that contain specific design requirements to reduce damage from strong seismic ground shaking, and based on the site's soil and groundwater conditions, seismic hazards would be ***less than significant*** *(Impact 4.5-1).*

Impact 4.5-2: Impacts from Shrink/Swell Hazards from Expansive Soils

Expansive soils shrink and swell as moisture levels change. Over time these volume changes can result in damage to any building foundations, roads, underground utilities, and other structures that are not designed and constructed appropriately to resist the changing soil conditions. Changes in the volume of expansive soils also can result in the consolidation of soft clays after the lowering of the water table or the placement of fill. Placing buildings on unstable soils can result in structural failure.

The discontinuous layer of silty clay encountered in four of the borings located at the reentry facility site was determined to have medium expansive soil properties that are capable of asserting medium pressures on slabs, foundations, and pavements (Wallace-Kuhl & Associates 2010:10). Based on the site-specific data, expansive soils are located at the reentry facility and are presumed to be located at the Estrella Adult Correctional Facility (Estrella Facility) and CAL FIRE sites as well. These expansive soil properties could affect the stability of the foundations of the new lethal electrified fence and buildings. As a state agency, CDCR is required to construct all new facilities in accordance with CBC standards. These standards require that appropriate soils and geotechnical reports be prepared and site-specific engineering design measures be implemented to appropriately mitigate any adverse onsite soil conditions in accordance with CBC standards.

Although expansive soil properties are located on the CDCR property, CDCR would design all on-site facilities in accordance with CBC design standards, and thus appropriate site-specific engineering design measures would be implemented to minimize any potential soils impacts. This impact would be ***less than-significant*** *(Impact 4.5-2).*

Impact 4.5-3: Soil Erosion Impacts

Renovation of the former Division of Juvenile Justice facility and reactivation as a Estrella Facility would not result in the disturbance of substantial areas of impervious surfaces. Most of the areas where construction activities would occur at these facilities would be paved or covered with buildings; therefore, potential soil erosion impacts are low. Reactivation of the CAL FIRE facility similarly would have low erosion impacts because very little construction would occur. However, construction of the full conservation camp improvements would involve ground disturbance for site preparation for new building foundations. Site preparation for the construction under the Master Reuse Plan would disturb approximately 15 acres of native soils. Although the reentry facility site is relatively flat, construction activities would temporarily disturb soil and could expose disturbed areas to wind and rain events. Rain of sufficient intensity could dislodge soil particles from the soil surface and generate runoff resulting in localized erosion. As a state agency, CDCR would be required to comply with all state requirements pertaining to stormwater quality and erosion. As described in Section 4.7, “Hydrology and Water Quality,” CDCR would prepare a SWPPP and would implement appropriate BMPs to appropriately control stormwater on the CDCR property during construction activities.

Because CDCR would implement appropriate stormwater controls in accordance with state requirements, the Master Reuse Plan would result in ***less-than-significant*** *impacts related to soil erosion (Impact 4.5-3).*

Impact 4.5-4: Impacts on Paleontological Resources

Construction of the full CAL FIRE conservation camp and the reentry facility could result in ground disturbance for building foundations and utility line installation that could exceed 10 feet in depth. Portions of the CDCR property are underlain by Pleistocene-age sediments, which are considered a paleontologically sensitive rock unit under SVP guidelines (1995). As discussed in Section 4.5.1, “Existing Conditions,” vertebrate fossils are recorded as located in sediments referable to the Miocene Monterey and the Pliocene Sisquoc formations. Criteria for assessing the importance of a paleontological resource, including individual vertebrate-fossil specimens, is outlined in Section 4.5.1, “Criteria for Assessing Paleontological Resources,” of this EIR. The fact that vertebrate fossils have been recovered relatively near to the CDCR property suggests that additional similar fossil remains could be uncovered during construction-related earthmoving activities at the conservation camp site. Therefore, the Master Reuse Plan would have the potential to disturb potentially significant paleontological resources.

Construction under the Master Reuse Plan could potentially damage vertebrate fossils. This impact would be ***potentially significant*** *(Impact 4.5-4).*

4.5.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.5-1: Impacts from Seismic Hazards

Impact 4.5-2: Impacts from Shrink/Swell Hazards from Expansive Soils

Impact 4.5-3: Soil Erosion Impacts

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as potentially significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below.

Mitigation Measure 4.5-4: Impacts on Paleontological Resources

Before the start of grading, excavation, or demolition at the CAL FIRE or reentry facility locations, CDCR will retain a qualified paleontologist or archaeologist to alert all construction personnel involved with earthmoving activities, including the site superintendent, about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered. If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the CDCR Project Director. CDCR will retain a qualified paleontologist to evaluate the resource and prepare a mitigation plan in accordance with SVP guidelines (1996). The mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by CDCR to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Implementation of this mitigation measure would reduce potentially significant impacts related to potential damage to unique paleontological resources to a less-than-significant level because construction workers would be alerted to the possibility of encountering paleontological resources, and if resources were encountered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

SIGNIFICANT IMPACTS THAT WOULD REMAIN SIGNIFICANT AND UNAVOIDABLE

No geology and soils impacts were identified as significant and unavoidable.

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4.6 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates potential hazards and hazardous materials impacts associated with implementation of the proposed project. Potential hazards and hazardous materials impacts are related to historic and current land uses on the 160-acre project site, and aviation overflights associated with the nearby Paso Robles Municipal Airport. The analysis presented in this section is based on a review of project design plans, a computerized database search, project information provided by CDCR staff, and a review of the following documents:

- *Phase I Environmental Site Assessment, CDCR Reentry Program—Paso Robles, Paso Robles, California* prepared by Wallace-Kuhl & Associates, Inc. (Vanir 2010);
- *Second Quarter 2009 Groundwater Monitoring Report, El Paso de Robles School for Boys, 4545 Airport Road, Paso Robles, California* prepared by Tetra Tech EM, Inc. (California Department of General Services 2009);
- *Annual Groundwater Sampling and Analysis Report, El Paso de Robles School For Boys, 4545 Airport Road, Paso Robles, California* prepared by Tetra Tech EM, Inc. (California Department of General Services 2010); and
- *Paso Robles Property Master Reuse Plan Aviation Safety & Land Use Compatibility Analyses* prepared by Heliplanners, Inc. (Heliplanners 2010).

Information from these and other documents is incorporated into this section and referenced as appropriate. Groundwater quality degradation impacts of the project are addressed in Section 4.7, "Hydrology and Water Quality." In addition, land use impacts associated with the airport land use plan (ALUP) for the Paso Robles Municipal Airport are considered in Section 4.8, "Land Use and Agricultural Resources," and impacts associated with aircraft noise are addressed in Section 4.9, "Noise."

4.6.1 EXISTING CONDITIONS

PASO ROBLES MUNICIPAL AIRPORT

The 160-acre CDCR property is located directly west/southwest of the existing Paso Robles Municipal Airport. The airport property consists of 1,231 acres and is located at the northeast corner of Dry Creek Road and Airport Road within the incorporated boundaries of the City of Paso Robles (City). The airport is a public-use general aviation airport owned and managed by the City. The airport houses 165 aircraft and operates two asphalt landing strips—one 6,000 feet long that runs from northeast to southwest, and the other 4,700 feet long that runs from northwest to southeast—and one asphalt helipad (NavAir 2010). The airport averages 94 flights per day (NavAir 2010). The airport is located directly east and northeast of the CDCR property across Airport Road and the southern end of the northeast-to-southwest landing strip is approximately 1,500 feet east of the CDCR property.

DATABASE SEARCHES

The U.S. Environmental Protection Agency's (EPA's) Envirofacts database was searched to confirm the information presented in the Phase I Environmental Site Assessment prepared for the approximately 15-acre reentry facility site, and to identify potential hazardous contamination sites on remaining areas of the site and in surrounding areas. The Envirofacts database presents information from several regulatory agencies and databases. The former Division of Juvenile Justice (DJJ) facility, named the El Paso de Robles School, is listed as an active Resource Conservation and Recovery Act (RCRA) generator of hazardous wastes and a community water system in the Envirofacts database (EPA 2010). Although the site is still listed as active in the database, operations at the site ceased in July 2008, and there is no longer any generation of hazardous waste.

The California Department of Toxic Substances Control's (DTSC's) EnviroStor database was also searched. EnviroStor maps properties regulated by DTSC and identifies where extensive investigation and/or cleanup actions are planned or have been completed. The CDCR property is not listed in the Envirostor database (DTSC 2010a). The adjacent Paso Robles Municipal Airport is listed as a military evaluation site. The CDCR property is also not listed in DTSC's "Hazardous Waste and Substances Site List—Site Cleanup" report (DTSC 2010b).

The CDCR property is listed as a permitted underground storage tank (UST) and an open leaking underground storage tank (LUST) cleanup site (SWRCB 2010). The cleanup status of the site is considered "Open—Verification Monitoring as of 1/28/2009." Potential contaminants of concern include fuel oxygenates and gasoline, and the potential media affected is an aquifer used for drinking water supply. No site history is provided, but the Second Quarter 2009 Quarterly Monitoring Report (see below) is listed. An annual groundwater sampling and analysis report was also prepared in June 2010.

SETTING OF THE CDCR PROPERTY

Environmental Site Assessment

A Phase I ESA was prepared for the approximately 15-acre reentry facility site in 2010. The purpose of a Phase I ESA is to identify potential and historical "recognized environmental conditions" associated with the use, generation, storage, or disposal of hazardous materials and/or wastes that could pose a risk to future users and workers during construction and operation of the proposed project. Recognized environmental conditions are the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or material threat of a release into structures at the property or into the ground, groundwater, or surface water at the property. This term includes hazardous substances or petroleum products even under conditions in compliance with laws. The Phase I ESA referenced in this section was conducted in general conformance with the scope and limitations set forth in the American Society for Testing and Materials Standard E1527-05, *Standard Practice for Environmental Site Assessments* (ASTM 2009).

The assessment revealed no evidence of recognized environmental hazard conditions in connection with the reentry site (Vanir 2010). Phase I ESAs have not been prepared for the proposed Estrella Adult Male Correctional Facility site or for the CAL FIRE Conservation Camp site. According to CDCR staff, the only recognized environmental condition on the 160-acre project site is the groundwater contamination associated with the former underground fuel storage tanks on the east-central portion of the El Paso de Robles School for Boys site (Maeda, pers. comm., 2010a). No additional reports, studies, or documents related to environmental investigations, site conditions, past operations, or hazardous materials contamination at the CDCR property are available (Maeda, pers. comm., 2010b).

Leaking Fuel Storage Tank and Groundwater Monitoring

Unleaded gasoline was dispensed from several USTs located in the east-central portion of the proposed Estrella Adult Correctional Facility. Four USTs that contained unleaded gasoline were removed from the Shop No. 46 area in May 1997. Analytical results from soil samples collected in 1997 suggested that one of the USTs had leaked and required further investigation to assess residual petroleum hydrocarbons, and approximately 10 cubic yards of soil was excavated and removed and disposed of off-site. Soil investigations were conducted in 1998, 1999, and 2000. In May 2000, a Corrective Action Workplan outlining planned removal of petroleum-contaminated soil from the UST excavation area was prepared. In 2003, the correction action was performed, involving the removal of approximately 2,000 cubic yards of soil from the UST excavation area to a depth of approximately 25–30 feet below ground surface (California Department of General Services 2009:1-2).

The UST excavation area is currently undergoing verification monitoring for hydrocarbon-contaminated groundwater. Groundwater monitoring wells were installed in 2000 to monitor petroleum contamination at the site. Twelve monitoring wells currently exist for the purpose of monitoring petroleum contamination. Nine of the

wells are screened in the shallow water bearing unit, and three are screened in the deeper water bearing unit. Groundwater monitoring has been conducted in the area since January 2000. Sample analyses have detected benzene, toluene, ethylbenzene, xylenes, total petroleum hydrocarbons, and fuel oxygenates. From August 2008 to May 2009, the maximum concentrations for these constituents with the exception of methyl tertiary-butyl ether (MTBE) were below primary maximum contaminant level (MCL) drinking water standards (California Department of General Services 2009:3-6).

Total petroleum hydrocarbons (TPHg) and the fuel oxygenate MTBE were both detected in concentrations greater than 30,000 micrograms per liter (µg/L) in monitoring well 6 in May 2003. Since that time, the concentrations of these chemicals in collected groundwater samples have dropped substantially. MTBE is now the only chemical at the site detected at significant concentrations. In general, MTBE concentrations at the site have declined substantially since 2004. Groundwater analysis conducted by Tetra Tech based on annual 2010 sampling found that MTBE concentrations remain above the primary MCL drinking water standard for MTBE of 13 parts per billion (ppb) in two of the 10 wells sampled. The maximum concentration of MTBE detected in on-site groundwater in March 2010 groundwater monitoring event was 310 ppb. The concentration of MTBE was greater than 30,000 ppb (or µg/L) in 2003. According to the 2010 annual groundwater monitoring report, it is Tetra Tech's opinion that "the existing MTBE concentrations do not justify active remediation or a monitoring frequency of greater than once per year" (California Department of General Services 2010:4-5).

Measured groundwater elevations were recorded for shallow wells and deep wells in the area of the Estrella Adult Correctional Facility. Groundwater elevations at the shallow well locations were approximately 25–30 feet below existing site grades, and groundwater elevations at the deep well locations were approximately 45–50 feet below existing site grades. Groundwater was not encountered within borings performed at the site of the proposed reentry facility at an exploration depth of approximately 40 feet below existing grades. It is likely that groundwater elevations on the CDCR property will vary because of changes in site elevations, subsurface soil conditions, seasonal variations, and proximity to Huerhuero Creek. Perched water should be anticipated above cemented geologic materials and in cleaner sand layers exposed at various depths across the CDCR property (Vanir 2010:5-6).

HAZARDS RELATED TO HEALTH CARE SERVICES FACILITIES

A nonacute-care facility would be located on the site. The hazards posed by chemicals and infectious agents used or present in health care facilities vary. Some chemicals can pose physical hazards, such as chemical burns, or health hazards, such as poison, which could potentially result in acute or chronic illnesses. The properties and health effects of different chemicals are unique to each chemical, and risks vary depending on the extent to which an individual is exposed. Exposure to biohazardous materials can result in a range of illnesses, depending on the infectious agent encountered. Some infections can result in short-term discomfort, which can be easily treated or go away by itself. Other illnesses can cause serious acute effects and result in dangerous disruption of life functions. Some chronic diseases may or may not be curable or treatable, and some diseases may be communicable. In all these cases, the risks posed by the hazardous materials depend on the potential for exposure.

4.6.2 REGULATORY BACKGROUND

Federal, state, and local regulations have been enacted to prevent or mitigate damage to public health and safety and the environment from airport-related hazards and the release of hazardous substances into the workplace or the environment, and to protect human health and environmental resources from existing contamination. The following federal, state, and local regulations are applicable to the proposed project.

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials

EPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained mainly in Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.);
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.); and
- Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA provides oversight and supervision for federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Resource Conservation and Recovery Act

RCRA establishes a framework for national programs to achieve environmentally sound management of both hazardous and nonhazardous wastes. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources. RCRA also promotes resource recovery techniques. A waste can legally be considered hazardous if it is classified as ignitable, corrosive, reactive, or toxic. Under RCRA, EPA regulates hazardous waste from the time that the waste is generated until its final disposal ("cradle to grave"). The Hazardous and Solid Waste Amendments of 1984 (HSWA) both expanded the scope of RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials including the export of hazardous waste, state programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste.

CERCLA and SARA

Hazardous substances are a subclass of hazardous materials. They are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA). Under CERCLA, EPA has authority to seek the parties responsible for releases of hazardous substances and ensure their cooperation in site remediation. CERCLA also provides federal funding (the "Superfund") for remediation. SARA Title III, the Emergency Planning and Community Right-to-Know Act, requires companies to declare potential toxic hazards to ensure that local communities can plan for chemical emergencies. EPA maintains a National Priority List of uncontrolled or abandoned hazardous waste sites identified for priority remediation under the Superfund program. EPA also maintains the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, which contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (15 USC 2605) banned the manufacture, processing, distribution, and use of polychlorinated biphenyls (PCBs) in totally enclosed systems. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans

(EPA 2004). The EPA Region 9 PCB Program regulates remediation of PCBs in several states, including California. 40 CFR Section 761.30(a)(1)(vi)(A) states that all owners of electrical transformers containing PCBs must register their transformers with EPA. Specified electrical equipment manufactured between July 1, 1978, and July 1, 1998, that does not contain PCBs must be marked by the manufacturer with the statement "No PCBs" (Section 761.40[g]). Transformers and other items manufactured before July 1, 1978, containing PCBs must be marked as such.

Chemical Accident Prevention

The provisions listed under CFR Part 68 set forth the list of regulated substances and thresholds, the petition process for adding or deleting substances from the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the state accidental-release prevention programs approved under Section 112(r). The California Accidental Release Prevention (CalARP) Program is the state adaptation of this federal regulation. The list of federally regulated substances and federally regulated flammable substances and their threshold quantities can be accessed online from the state's Californian Emergency Management Agency's (formerly the Office of Emergency Services) Web site, http://www.oes.ca.gov.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA) was included under the SARA law and is commonly referred to as SARA Title III. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, state, and local governments, Indian tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of extremely hazardous substances (40 CFR 355, Appendix A). The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the CalARP.

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act (HMTA), which is administered by the Research and Special Programs Administration of the U.S. Department of Transportation (DOT). HMTA provides DOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property that is inherent in the commercial transportation of hazardous materials. The HMTA governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The Research and Special Programs Administration carries out these responsibilities by prescribing regulations and managing a user-funded grant program for planning and training grants for states and Indian tribes. DOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or is involved in any way with the manufacture or testing of hazardous materials packaging or containers. DOT regulations pertaining to the actual movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing. Additionally, DOT is responsible for developing curriculum to train for emergency response, and administers grants to states and Indian tribes for ensuring the proper training of emergency responders. HMTA was enacted in 1975 and was amended and reauthorized in 1990, 1994, and 2005.

Worker Safety

The U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) requires that workers be informed of the hazards associated with the materials they handle. For instance, manufacturers must appropriately label containers, material safety data sheets must be available in the

workplace, and employers must properly train workers. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120).

The OSHA Bloodborne Pathogens Standard requires the use of universal precautions (handling all human blood and certain body fluids as if they contain infectious agents) in the workplace. Operation of the proposed project would require compliance with these federal and state safety standards and practices, regarding workplace safety and providing a safe and healthy environment for patient care.

Asbestos and Lead

Renovation and demolition of asbestos contaminated buildings is subject to EPA National Emissions Standards for Hazardous Air Pollutants and OSHA worker health and safety regulations. Asbestos is the common name for a variety of naturally occurring, fibrous silicate minerals mined for uses including thermal insulation, acoustic insulation, and fireproofing. When asbestos is inhaled it may become lodged in the lungs. Resulting health effects include asbestosis, characterized by irritation and scaring of lung tissue; mesothelioma, a rare form of cancer that targets the lung, chest, abdomen, and heart; and lung cancer (EPA 2008a).

EPA regulates environmental lead through several statutes, including the Toxic Substances Control Act, RCRA, and EPCRA. OSHA regulates workplace lead exposure. People may be exposed to lead by eating or inhaling soil or other contaminated media. In adults, lead poisoning can cause reproductive problems, high blood pressure, hypertension, nerve disorder, memory and concentration problems, and muscle and joint pain. In children, high levels of lead absorption can result in developmental problems, such as damage to the brain, learning difficulties, slowed growth, headaches, and hearing problems (EPA 2008b).

Safe Drinking Water Act

Under the Safe Drinking Water Act (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supply. Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA's primary and secondary MCLs, which are applicable to treated water supplies delivered to a distribution system. MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting MCLs for drinking water.

EPA has delegated to the California Department of Public Health (CDPH) the responsibility for administering California's drinking-water program. CDPH is accountable to EPA for program implementation and for adopting standards and regulations that are at least as stringent as those developed by EPA. The applicable state primary and secondary MCLs are set forth in Title 22, Division 4, Chapter 15, Article 4 of the California Code of Regulations.

Airport Overflight Hazards: Federal Aviation Regulations Part 77

The Federal Aviation Regulations, or FARs, are rules prescribed by the Federal Aviation Administration (FAA) governing all aviation activities in the United States. The FARs are part of CFR Title 14 and are organized into sections called "parts" to reflect their organization within the CFR. Part 77 of the FAR, "Objects Affecting Navigable Airspace," has been adopted as a means of monitoring and protecting the airspace required for safe operation of aircraft and airports. Objects that exceed certain specified height limits constitute airspace obstructions. FAR Part 77, Section 77.13 requires that FAA be notified of proposed construction or alteration activities within a specified vicinity of an airport. The following Section 77.13 and Section 77.17 regulations are applicable to the proposed project:

Sec. 77.13 Construction or alteration requiring notice.

(a) Except as provided in Sec. 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in Sec. 77.17:

(2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.

(5) Any construction or alteration on any of the following airports (including heliports):

(i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

Sec. 77.17 Form and time of notice.

(a) Each person who is required to notify the Administrator under Sec. 77.13(a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Department of Toxic Substances Control

DTSC, a division of the California Environmental Protection Agency (Cal/EPA), has primary regulatory responsibility over hazardous materials in California, working in conjunction with the federal EPA to enforce and implement hazardous materials laws and regulations. DTSC can delegate enforcement responsibilities to local jurisdictions. The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.), which is implemented by regulations described in California Code of Regulations (CCR) Title 26. The state program thus created is similar to but more stringent than the federal program under RCRA. The regulations list materials that may be hazardous and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the state, called the Cortese List.

Hazardous Materials Handling and Transport

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories. A business plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local

jurisdictions that enter into agreements with the state. Local agencies are responsible for administering these regulations.

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including Cal/EPA and the California Emergency Management Agency. The California Highway Patrol and California Department of Transportation (Caltrans) enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways.

Hazardous Waste Control

The Hazardous Waste Control Act (HWCA) regulates the generation, treatment, storage, and disposal of hazardous waste. Hazardous waste is any material or substance that is discarded, relinquished, disposed of, or burned, or for which there is no intended use or reuse, and the material or substance causes or substantially contributes to an increase in mortality or illness; or the material or substance poses a substantial present or potential hazard to human health or the environment. These materials or substances include spent solvents and paints (oil and latex), used oil, used oil filters, used acids and corrosives, and unwanted or expired products (e.g., pesticides, aerosol cans, cleaners). If the original material or substance is labeled *Danger*, *Warning*, *Toxic*, *Caution*, *Poison*, *Flammable*, *Corrosive*, or *Reactive*, the waste is very likely to be hazardous.

Regulatory Definitions for Hazardous Waste

"Hazardous waste" is a subset of hazardous materials and is defined as "wastes that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed" (Health and Safety Code, Section 25517). Hazardous materials can be categorized as nonradioactive chemicals materials, radioactive materials, and biohazardous materials. Nonradioactive chemical materials typically fall within the definitions of hazardous materials and hazardous waste, as defined above. Radioactive and biohazardous materials are further defined below:

- Biohazardous materials are materials that contain certain infectious agents (microorganisms, bacteria, molds parasites, viruses) that normally cause or significantly contribute to increased human mortality, or organisms that are capable of being communicated by invading and multiplying in body tissues. *(Health and Safety Code, Section 117635)*

- Medical waste includes both byproducts of biohazardous materials and devices capable of cutting or piercing (commonly referred to as "sharps"), such as hypodermic needles, razor blades, and broken glass, resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities. *(Health and Safety Code, Section 117690)*

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability. Radioactive wastes are radioactive materials that are discarded, including waste in storage, or abandoned. *(Health and Safety Code, Section 114710)*

Government Code Section 65962.5 (Cortese List)

The provisions of Government Code Section 65962.5 are commonly referred to as the "Cortese List." The Cortese List is a planning document used by state and local agencies to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires Cal/EPA to develop and updated Cortese List annually, at minimum. DTSC is responsible for a portion of the information contained in the Cortese List. Other California state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Multi-Hazard Mitigation Plan

The California Emergency Management Agency adopted the 2007 State Hazard Mitigation Plan on October 8, 2007. This plan is the official statement of California's statewide hazard mitigation goals, strategies, and priorities. Hazard mitigation can be defined as any action taken to reduce or eliminate long-term risk to life and property by natural and human caused disasters. The plan, required under federal law, includes chapters on hazard assessment, local hazard mitigation planning, and mitigation strategy and must be updated every three years.

Public Health and Worker Safety Requirements

The California Human Health Screening Levels (CHHSLs) are concentrations of 54 hazardous chemicals in soil or soil gas that Cal/EPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of Cal/EPA. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1.0 for noncancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by EPA and Cal/EPA.

The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans, and provides specific regulation to limit exposure of construction workers to lead.

The California Department of Public Health (formerly California Department of Health Services) regulates the generation, handling, storage, treatment, and disposal of medical waste in accordance with the California Medical Waste Management Act (California Health and Safety Code, Sections 117600–118360). This law requires medical waste generators to register with the California Department of Public Health, Medical Waste Management Program, and submit a medical waste management plan to the local enforcement agency.

The use of radiologic materials is governed by the Radiologic Health Branch of the California Department of Public Health's Food, Drug, and Radiation Safety Division. The branch enforces the following laws and regulations designed to protect the public, radiation workers, and the environment:

- Radiation Control Law (Health and Safety Code, Section 114960 et seq.);
- Radiologic Technology Act (Health and Safety Code, Section 27[f]); and
- Nuclear Medicine Technology Certification (Health and Safety Code, Sections 107150–107175).

Regulations implementing the above laws are in CCR Title 17, Division 1, Chapter 5, Subchapters 4.0, 4.5, and 4.6.

The Dangerous Weapons Control Laws (Title 2 of Part 4 of the California Penal Code), enforced by the California Department of Justice, lay out specific "safe storage" requirements for firearms and other weapons.

State Water Resources Control Board and Regional Water Quality Control Boards

The State Water Resources Control Board (SWRCB) and nine regional water quality control boards (RWQCBs) are responsible for ensuring implementation and compliance with the provisions of the federal Clean Water Act and the Porter-Cologne Act of 1969. The Porter-Cologne Act is California's statutory authority for the protection of water quality. Along with the SWRCB and RWQCBs, water quality protection is the responsibility of numerous water supply and wastewater management agencies, as well as city and county governments, and requires the coordinated efforts of these various entities. Individual RWQCBs are responsible for identifying, monitoring, and cleaning up LUSTs. The Central Coast RWQCB's UST cleanup unit provides technical and regulatory oversight for the investigation and cleanup of sites with leaks from USTs. LUSTs are an important threat to groundwater and pose a potential threat to human health, safety, and the environment.

Airport Land Use

The state regulates airports under the authority of the Airport Land Use Commission Law, Section 21670 et seq. of the California Public Utilities Code. *The California Airport Land Use Planning Handbook* published by the Caltrans Division of Aeronautics (Caltrans 2002) supports this law by providing compatibility planning guidance to airport land use commissions (ALUCs), counties and cities having jurisdiction over airport area land uses, and airport proprietors. The handbook is utilized as a technical resource by the lead agency preparing an EIR (Public Resources Code Section 21096(a)).

The Airport Land Use Commission Law is implemented through ALUCs, which are required in every county with a public use airport or with an airport served by a scheduled airline. Under the provisions of the law, the ALUC has certain responsibilities conferred upon it and specific duties to perform. Among these are preparing airport land use plans for each of the airports within its jurisdiction (California Public Utilities Code, Sections 21674(c) and 21675(a)). The *California Airport Land Use Planning Handbook* describes six airport safety compatibility zones. These airport safety zones have been developed to reflect the geographic pattern of aircraft accident risks.

Fire Hazard Severity Zones

Sections 4201–4204 of the California Public Resources Code and Sections 51175–51189 of the Government Code require identification of fire hazard severity zones within the state of California. Fire prevention areas considered to be under state jurisdiction are referred to as "state responsibility areas." In state responsibility areas, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high; whereas "local responsibility areas," which are under the jurisdiction of local entities (e.g., cities, counties), are required to only identify very high fire hazard severity zones. The hazard ranges are measured quantitatively, based on vegetation, topography, weather, crown fire potential (a fire's tendency to burn upward into trees and tall brush), and ember production and movement within the area of question.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Paso Robles Municipal Airport Master Plan

The *Paso Robles Municipal Airport Master Plan* (City of Paso Robles 2004) was adopted by the San Luis Obispo County Board of Supervisors in November 2004. The master plan integrates long-term airfield and terminal area requirements with current and forecast aviation needs and airport access and parking needs. It represents a guide for airport development through the year-2020 planning period and indicates possible developments beyond the year 2020 for which land should be reserved (City of Paso Robles 2004:5-1).

Paso Robles Municipal Airport Land Use Plan

The *Paso Robles Municipal Airport Land Use Plan* was adopted by the San Luis Obispo County Airport Land Use Commission (SLOALUC) in November 1977 and amended in May 2007. The plan establishes planning boundaries for the airport and defines compatible types and patterns of future land use. The purpose of this ALUP is to:

- assist in the preservation, continued development, and expansion of the airport consistent with the *California Airport Land Use Planning Handbook* and the adopted *Paso Robles Municipal Airport Master Plan*;
- protect the public health, safety, and welfare by identifying land use measures to minimize the public's exposure to excessive noise and safety hazards within areas surrounding the airport;
- promote the safety and well being of the public by ensuring adoption of land use regulations; and
- provide policies and criteria to assist the SLOALUC and local reviewing agencies in evaluating the compatibility of proposed local actions and in determining the consistency of the proposed local action with the ALUP.

The *Paso Robles Municipal Airport Land Use Plan* describes six safety compatibility zones that are intended to minimize the risks to the safety and property of persons on the ground associated with potential aircraft accidents (San Luis Obispo County 2007:4-9). The safety zones identify allowable land uses and are defined as Safety Zone 1 (Runway Protection Zones), Safety Zone 2 (Inner Approach/Departure Zone), Safety Zone 3 (Turning and Sideline Zones), Safety Zone 4 (Outer Approach/Departure Zone), Safety Zone 5 (Traffic Pattern Zone), and Safety Zone 6 (Outer Airport Influence Zone) (City of Paso Robles 2007:4-9 and 4-10). The CDCR property is within Safety Zones 3 and 5 (see Exhibit 4.6-1).The following provides a brief description of the safety zones:

- **Safety Zone 1** (Runway Protection Zone): Four trapezoidal areas that extend from a distance of 200 feet beyond the end of each runway to a distance of 2,700 feet from the runway. This safety zone excludes any land within the airport area.

- **Safety Zone 2** (Inner Approach/Departure Zone): Four rectangular areas that lie immediately beyond the Runway Protection Zone (i.e., Safety Zone 1) and extend from a distance of 2,700 feet beyond the end of each runway to a distance of 6,000 feet from the runway ends. This safety zone excludes any land within the airport area.

- **Safety Zone 3** (Turning and Sideline Zones): An irregularly shaped zone that includes:

  - the area encompassed by a 15-degree angle to either side of the extended runway centerline, constructed at a point that is on the centerline and 2,000 feet from the end of the runway, and that is within 6,000 feet of such point;

  - trapezoidal areas adjacent to the extended centerline of each runway that extend from a distance of 4,000 feet from the end of the runway to the outer limit of the Airport Planning Area, and whose lateral boundaries lie at perpendicular distance of 1,070 feet from the extended runway centerline and distance increases by an additional 0.15 foot for each additional foot of distance from the runway end;

  - the area that lies within 1,000 feet of:

    - any point on any runway centerline, or

    - any point on that portion of any extended runway centerline that is within 1,000 feet of the end of the corresponding runway.

  Airport property and areas encompassed by Safety Zones 1 and 2 are excluded.

- **Safety Zone 4** (Outer Approach/Departure Zone): Four rectangular areas that lie immediately beyond Safety Zone 2 and extend from a distance of 6,000 feet beyond the end of each runway to a distance of 10,000 feet from the runway ends. This zone also includes an additional area to the southeast of the extended centerline of Runway 19 to accommodate increased traffic, including larger aircraft, utilizing a southeasterly departure from the runway.

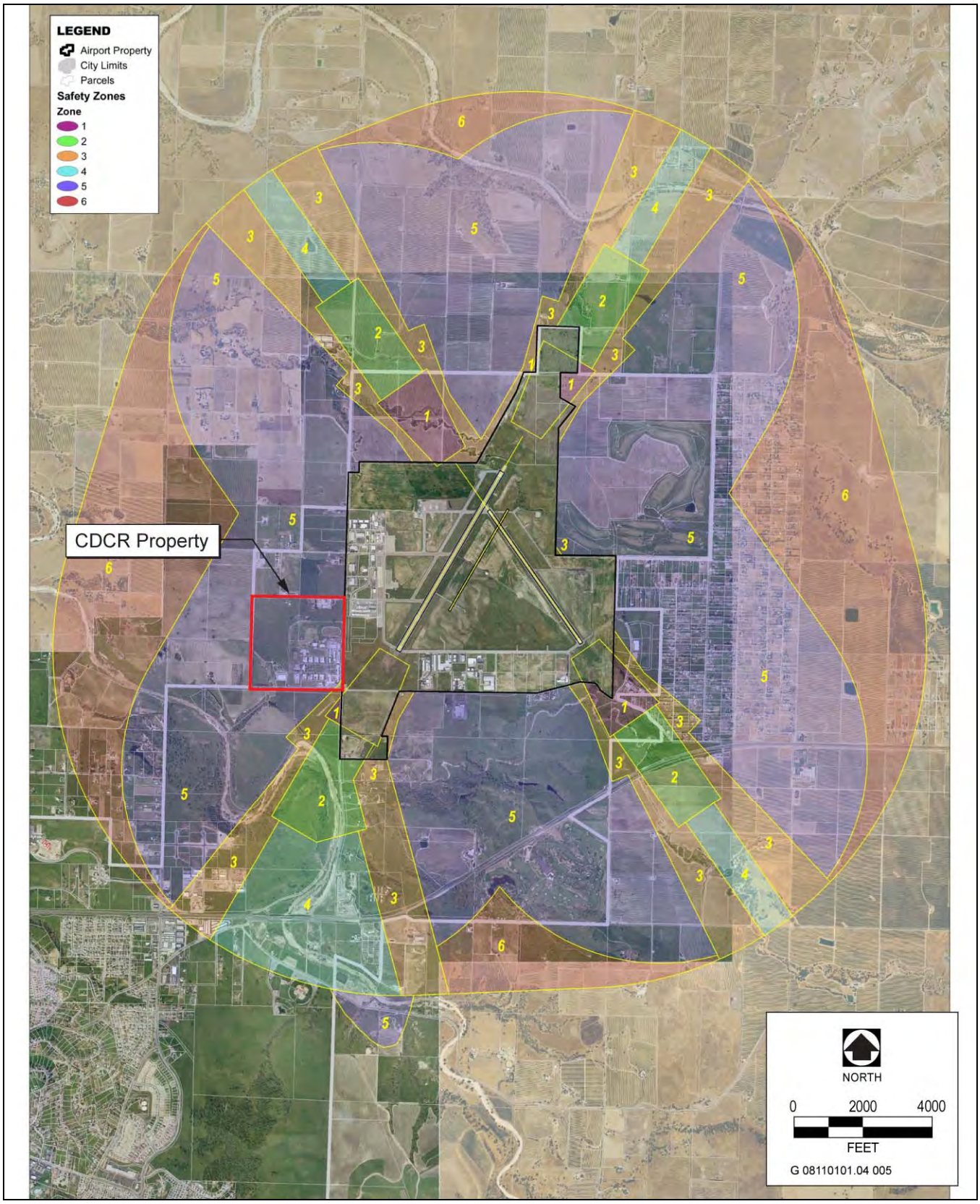
- **Safety Zone 5** (Traffic Pattern Zone): Includes:

  - the area that lies within 6,000 feet of:

    - any point on any runway centerline, or

      - any point on that portion of any extended runway centerline that is within 4,000 feet of the end of the corresponding runway;

  - the area that lies within the projected 55-decibel (dB) community noise equivalent (CNEL) airport noise contour.



Source: San Luis Obispo County Airport Land Use Commission 2007, Figure 3; adapted by AECOM in 2010

Paso Robles Municipal Airport Safety Zones **Exhibit 4.6-1**

Airport property and areas encompassed by Safety Zones 1–4 are excluded.

- **Safety Zone 6** (Outer Airport Influence Zone): Includes all portions of the Airport Planning Area that are not within the airport boundary or within Safety Zones 1–5.

The *Paso Robles Municipal Airport Land Use Plan* prohibits new extremely noise-sensitive or moderately noise-sensitive land uses in those areas inside or above the 55-dB CNEL contours, with the exception of development in areas bound by uses similar to those proposed, and as long as the proposed development does not extend the perimeter of the area already developed with noise-sensitive uses (San Luis Obispo County 2007:4-8). The existing correctional facility is within the 55-dB CNEL noise contour (see Section 4.6, "Noise," of this DEIR).

The City of Paso Robles has also adopted rules and regulations for the Paso Robles Municipal Airport. Rule 3.85 requires that all aircraft shall avoid over flight of the DJJ facility at altitudes of less than 1,000 feet. This rule was put in place to help avoid airport related hazards on CDCR's property.

New development that requires adoption of general plans and general plan amendments, adoption of specific plans and specific plan amendments, and amendments to zoning or land use control ordinances is subject to review and approval by the SLOALUC (San Luis Obispo County 2007:2-3). The SLOALUC has no authority over existing land use, whether or not such uses are compatible with the *Paso Robles Municipal Airport Land Use Plan*. A land use is considered to be existing if a vesting tentative map has been approved and/or all discretionary approvals have been obtained; substantial construction investments by the landowner make it infeasible for the property to be used for anything other than its proposed use; or the land use physically exists (San Luis Obispo County 2007:2-5).

4.6.3 Environmental Impacts of the Project

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a hazards and hazardous materials impact is considered significant if implementation of the proposed project would do any of the following:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the California Government Code and, as a result, would create a significant hazard to the public or the environment;
- result in a safety hazard for people residing or working in the project area, where the project is located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport;
- result in a safety hazard for people residing or working in the project area, where the project is located near a private airstrip;

- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Proposed project facilities would not be located within one-quarter mile of existing or proposed schools. Based on a review of available maps and other information, no schools are or would be located in the immediate vicinity of the CDCR property. Because proposed project facilities that could potentially emit hazardous emissions or involve the handling of hazardous materials or substances would not be located within one-quarter mile of a school, this issue is not evaluated further in this DEIR.

Based on a review of available maps and information, no private airstrips are located in the immediate vicinity of the CDCR property, and safety issues related to private airstrips are not evaluated further in this DEIR. The CDCR property is located to the west of the Paso Robles Municipal Airport, and related safety hazards are considered in this section.

Issues related to physical interference with emergency access are addressed in Section 4.11, "Traffic and Circulation." Furthermore, project design plans include sufficient CDCR property ingress and egress routes to ensure public safety in the event of an emergency. Therefore, this issue is not evaluated further in this section.

With respect to wildland fire risk, the CDCR property is located within an incorporated Local Responsibility Area classified as a non–Very High Fire Hazard Severity Zone (CDF 2009). In addition, according to the County of San Luis Obispo Fire Hazard Zone Map (San Luis Obispo County 1999:Map 7), the CDCR property is located within a medium fire hazard zone, which is the lowest fire hazard designation provided by San Luis Obispo County. The majority of the CDCR property is developed with the former DJJ facility in the southeastern portion of the CDCR property, and the existing CAL FIRE facility in the northeastern portion of the site. In addition, the proposed reentry facility would occupy a significant part of the northwestern portion of the CDCR property. The CDCR property is surrounded by vineyards, the Paso Robles Municipal Airport, and land proposed for a business park development. Therefore, project implementation would not expose people or structures to a significant wildland fire risk, and this issue is not evaluated further in this DEIR.

PROJECT IMPACTS

Impact 4.6-1: Creation of Hazards to the Public or the Environment through the Routine Use, Transport, or Disposal of Hazardous Materials

The Estrella and CAL FIRE facilities would consist of administrative buildings, a health care services facility, housing facilities for 1,130 inmates, vocational and training facilities, a boiler plant, kitchen complex, fuel tanks, a paint storage building, warehouses and other storage areas (including an armory), and maintenance and support facilities. The reentry facility would include construction of housing for 500 inmates, space for work and rehabilitation programs and activities, administrative buildings, armory, a boiler plant, kitchen and mess hall, and maintenance and support facilities.

Construction of these facilities would involve the storage, use, and transport of hazardous materials (e.g., asphalt, fuel, lubricants, paint). Operation would also involve the routine transport of common hazardous materials (e.g., cleaning fluids, solvents, paints, fuels, household chemicals) on- and off-site. Facilities maintenance activities would require the use of various common hazardous materials, including cleaners (which may include solvents and corrosives, in addition to soaps and detergents); paints; pesticides and herbicides; fuels (e.g., diesel); and oils and lubricants. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol and Caltrans, whereas use of these materials is regulated by DTSC, as outlined in Title 22 of the California Code of Regulations. Nonacute health care facilities typically generate, store, use, and dispose of various types of

hazardous waste such as biohazardous waste, pharmaceutical waste, and other toxic chemicals associated with medical instruments.

The project-related effects of hazardous materials handled on-site would generally be limited to the immediate areas where materials would be located because this is where exposure would most likely occur. Accordingly, the individuals most at risk would be the employees at the health care facility, facilities and maintenance employees, or others in the immediate vicinity of hazardous materials. The routes through which these individuals could be exposed include inhalation, contact, ingestion, and injection. Exposure could occur as a result of an accident involving hazardous materials. Aside from accidents possibly occurring on-site, accidents during hazardous materials or hazardous waste transport to and from the site could expose individuals and the environment to risks at some distance from the site. However, federal and state laws set occupational safety standards to minimize worker safety risks from both physical and chemical hazards in the workplace. The proposed project would be operated in compliance with these federal and state safety standards and practices regarding workplace safety, providing a safe and healthy environment for inmates and state employees. For the most part, the health and safety procedures that protect workers and other individuals in the immediate vicinity of hazardous materials would also protect the more distant community and environment.

Hazardous materials specific to correctional uses are generally limited to firearms, ammunition, and other miscellaneous weaponry, such as tear gas and pepper spray canisters. The Estrella and reentry facilities would include an armory for the safe and secure storage of firearms, ammunitions, and miscellaneous weaponry. The armory would be constructed to meet the "safe storage" requirements of Dangerous Weapons Control Laws (Title 2 of Part 4 of the California Penal Code) as regulated by the California Department of Justice. Therefore, because the firearms and ammunitions would be used and stored according to state regulations, the Paso Robles Property Master Reuse Plan (Master Reuse Plan) would not result in a risk related to the storage of weapons on the site.

During construction, builders, contractors and others would be required to use, store, and transport hazardous materials in compliance with federal, state, and local regulations. Facilities that would use hazardous materials on-site after the project is constructed would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid releases of hazardous materials and hazardous waste.

The Master Reuse Plan would involve the storage, use, transport, and disposal of hazardous materials at the site during construction. In addition, because the Master Reuse Plan includes correctional, CAL FIRE Conservation Camp, and health care services facility uses, hazardous materials would be used during project operation. Use of hazardous materials at the site would be in compliance with federal, state, and local regulations, and all facility-related hazardous materials and associated activities are regulated by various government agencies. Because the Master Reuse Plan would implement and comply with existing regulations concerning the routine transport, use, handling, and disposal of hazardous materials, this impact would be ***less than significant*** *(Impact 4.6-1).*

Impact 4.6-2: Exposure of Construction Workers and the Environment to Hazardous Materials

Construction-related activities, such as the use of equipment that contains hazardous materials (e.g., diesel-fueled equipment), the excavation and transportation of contaminated soil, and the demolition and renovation of existing older structures, could expose construction workers and the environment to hazardous materials. Development of the Master Reuse Plan would involve grading, excavation, and construction of new facilities. Potential sources of hazardous materials that exist within the project footprint are summarized below.

UST Excavation Area

Four USTs that contained unleaded gasoline were removed from the former DJJ facility Shop No. 46 area in May 1997. Analytical results from soil samples collected in 1997 suggested that one of the USTs had leaked and required further investigation to assess residual petroleum hydrocarbons, and approximately 10 cubic yards of soil was excavated and disposed of off-site. In 2003, approximately 2,000 cubic yards of soil from the UST excavation area was removed to a depth of approximately 25–30 feet below ground surface (California

Department of General Services 2009:1-2). Monitoring activities are still ongoing at the site. Construction activities at or near the UST excavation area could expose construction workers to residual contaminated soil or MTBE-contaminated perched groundwater. In addition, unknown or undocumented USTs may exist that could be discovered during construction and grading activities. No USTs are known to be located within the reentry site. However, uncovering an undocumented UST on the CDCR property could expose construction workers to contaminated soils, could damage equipment, or cause injury to construction workers. Furthermore, the presence of contamination in on-site soils could create a significant environmental or health hazard if left in place.

Older Structures

Because of the age of the former DJJ and CAL FIRE buildings and structures, there is a high likelihood that lead-based paint and asbestos-containing materials may be present in building materials and CDCR staff has indicated that such materials are present in CDCR property buildings and structures. In addition, electrical switches, light ballasts, and transformers containing PCBs may also be present. If allowed to deteriorate, these materials could result in localized lead and asbestos contamination. These materials could also become airborne during demolition and renovation activities and create a hazard for construction workers at the site. Exposure to asbestos and/or lead as well as PCBs could lead to substantial health effects, and therefore would be significant impacts.

A hazardous waste storage shed and a recycling shed are located along the northern boundary of the reentry site. The hazardous materials storage shed was used to temporarily store wastes such as oils and batteries before being hauled from the site. No soil staining was observed around the perimeter of the hazardous materials storage shed (Vanir 2010:3). The removal of these structures could result in the exposure of construction workers to these substances. This impact would be potentially significant.

Former Agricultural Uses

Lands within the city and project area have historically been used for agricultural purposes. Although no structures existed on the CDCR property until the late 1940s, portions of the CDCR property have been used for agricultural purposes (i.e., orchard) in the past. Phase I ESAs have not been prepared for the Estrella Adult Correctional Facility or for the CAL FIRE facility. A Phase I ESA was prepared for the approximately 15-acre reentry facility site in 2010. The assessment revealed no evidence of recognized environmental conditions in connection with the reentry site (Vanir 2010:ii). However, agricultural activities were and are currently common in the project area and these activities often involve application of pesticides, herbicides, and chemical fertilizers. Residual agricultural chemicals such as these may still exist as a result of past agricultural operations on-site and include chlorinated pesticides, carrier fluids (i.e., petroleum hydrocarbon–based), and heavy metals. Implementation of the Master Reuse Plan would require excavation and other earth-moving activities that may result in exposure of construction workers to hazardous agricultural chemicals. Several shallow drainage swales traverse the CDCR property and may have been contaminated by pollutants. Additionally, buried agricultural structures such as drainage pipelines may exist below the ground surface. Excavation and grading activities may result in the unearthing of the structures, which could damage equipment or cause injury to construction workers. This impact would be potentially significant.

Site soils and older buildings could contain hazardous chemicals or materials. Because the CDCR property could contain petroleum hydrocarbons, fuel oxygenates, PCBs, and hazardous building materials such as lead-based paint and asbestos-containing materials, as well as residual agricultural chemicals such as chlorinated pesticides, construction workers and the environment could be exposed to these materials. This impact would be ***potentially significant*** *(Impact 4.6-2).*

Impact 4.6-3: Potential for Safety Hazards Associated with Proximity to Paso Robles Municipal Airport

The CDCR property is adjacent to the Paso Robles Municipal Airport. Implementation of the Master Reuse Plan involves the renovation of existing facilities and construction of new facilities and structures, including two 35-foot-tall observation towers, five 35-foot-tall pole-mounted lights along the eastern secure perimeter fence, and an approximately 12-foot-tall double perimeter security fence.

Caltrans' *Airport Land Use Planning Handbook*

Caltrans' *Airport Land Use Planning Handbook* was utilized as a technical resource in preparing this EIR. The handbook does not discourage the activation of an institutional land use at an existing facility near the airport, although it does suggest that new schools, hospitals, and nursing homes should be prohibited in certain Safety Zones. Most of the technical provisions of the *Handbook* have been incorporated into the San Luis Obispo County ALUP.

San Luis Obispo County Airport Land Use Plan

The *Paso Robles Municipal Airport Land Use Plan* describes six safety compatibility zones that are intended to minimize the risks to the safety and property of persons on the ground associated with potential aircraft accidents (San Luis Obispo County 2007:4-9). The CDCR property is primarily within Safety Zone 5 and a small portion of the southeastern portion of the property (parking lot of the Estrella Facility) is located within Safety Zone 3 (see Exhibit 4.6-1).

This ALUP sets forth land use compatibility policies applicable to future development in the vicinity of the airport. The compatibility policies were designed to ensure that future land uses in the area surrounding the airport would be compatible with the foreseeable aircraft activity.

The *Paso Robles Municipal Airport Land Use Plan* contains a land use matrix that lists those land uses that are compatible or prohibited within each safety zone. A review of the matrix indicates that institutional uses including "All Schools, Hospitals, Correctional Facilities" should be prohibited within Zones 1–5. This of course includes both Zones 3 and 5 (SLOALUC 2007:5-1 through 5-8). The report states that:

> Prohibited land uses are designated in the Land Use Matrix by the symbol "X" (in the matrix). The associated land use groups are at a level of intensity or density, or location, which presents a significant risk to the safety of persons on the ground or to persons in aircraft overflying the proposed use, or the land use groups are sensitive to anticipated aircraft noise or frequent aircraft overflights.

Prohibited actions are considered to be inconsistent with the plan and are normally subject to review by the SLOALUC. The Master Reuse Plan would appear to be an incompatible use with the airport. However, in making this determination, the SLOALUC would likely also consider the historical use of the CDCR property. In this case, CDCR has a long-standing history of operating correctional and CAL FIRE facilities on the property during operation of the airport. Although new facilities would be constructed under the Master Reuse Plan, these facilities would continue to support historical correctional activities on the site.

Regarding land uses on the CDCR property in Safety Zone 3, the only land use that would occur in Safety Zone 3 under the Master Reuse Plan is a paved parking area. Parking would normally be considered compatible with aircraft operations within Safety Zone 3.

Regarding Safety Zone 5, many of the proposed land uses under the Master Reuse Plan would be acceptable on an individual basis (e.g., open fields, athletic fields, office buildings, public buildings, personal services, health clinics) based on the land use matrix in the *Paso Robles Municipal Airport Land Use Plan*. Therefore, many of the existing and proposed on-site facilities would be considered to be compatible with the plan. However, when considered in aggregate, correctional facilities are considered a prohibited land use by the SLOALUC.

The *Paso Robles Municipal Airport Land Use Plan* has also established maximum allowable densities for nonresidential land uses (SLOALUC 2007:4-12). For Safety Zone 4, the maximum land use density for a property would be 150 person/acre. Staff of the SLOALUC indicated that this threshold would be applicable to the CDCR property (Robeson pers. comm., 2010). Under the Master Reuse Plan, a total of 1,630 inmates and 998 staff would be located on the CDCR property. Assuming that an additional 100 visitors may be located on-site at any one time, the Master Reuse Plan would result in a total density of 17 persons per acre (i.e., 2,728 people/160

acres), which is substantially below the maximum density threshold in the *Paso Robles Municipal Airport Land Use Plan*.

CDCR has met with staff of the Paso Robles Municipal Airport and SLOALUC (April 29, 2010, at the airport). Based on discussions held in that meeting, the density of on-site land uses is the primary concern for the site (Robeson, pers. comm., 2010). Based on the discussion provided above, the Master Reuse Plan would result in maximum land use densities that are substantially below allowable levels. CDCR, as a state agency, is not subject to local land use policies and plans. Although CDCR has considered the Master Reuse Plan's consistency with the *Paso Robles Municipal Airport Land Use Plan*, it has final authority to determine whether the Master Reuse Plan would result in incompatibilities that could result in adverse safety impacts.

Electromagnetic Fields

Some of the proposed facilities and operations (e.g., guard towers, high-mast lights, electromagnetic fields (EMFs) from the lethal electrified fence, and radio use on-site) could create a "hazard to air navigation," and could involve "obstructions to air navigation" as defined by the *Paso Robles Municipal Airport Land Use Plan* (San Luis Obispo County 2007:4-6).

Regarding EMF interference, previous studies conducted by CDCR for the lethal electrified fence determined that based on the measurements conducted, the EMF would be fairly high (i.e., vertical) above the fence but would dissipate rapidly with horizontal distance from the fence. The basic construction of the lethal electrified fence has not changed since this study was prepared. Lethal electrified fences, with a current of about 5,000 volts (which is proposed for the Estrella Facility), would have no more effect on aircraft instruments and communication than a standard distribution power pole line (the wood poles typically used to distribute electricity to users). Also, the frequency of the proposed lethal electrified fence, 60 Hertz, is not at a level that usually affects radios and instrumentation (Randall, pers. comm., 2010). Therefore, potential aviation impacts from EMF originating from the CDCR property would be less than significant.

Airspace Obstructions

The standards for determining obstructions in navigable airspaces are described in FAR Part 77, "Objects Affecting Navigable Airspace." As described in the standards for noticing the FAA about proposed construction activities, Section 77.13, "Construction or Alteration Requiring Notice" for projects within 20,000 feet of a public use airport (with at least one runway more than 3,200 feet in length), any construction or alteration of greater height than an imaginary surface extending outward and upward at a slope of 100 to 1 from the nearest point of the nearest runway shall notify the FAA in the form and manner as described in Section 77.17. The proposed project is located within 1,500 feet of the airport's northeast to southwest runway. At this distance, in order to require FAA notification, project structures would need to be at least 15 feet tall (1,500 feet away at a 100:1 slope). CDCR would be required to notify the FAA because the project includes two 35-foot-tall observation towers and five 35-foot-tall perimeter pole-mounted lights (Heliplanners 2010). Therefore, the proposed project may be inconsistent with Airspace Protection Policy 4.6.2, Policy A-1 of the ALUP. Because FAA notification and consistency determination would be required, project structures might constitute a hazard to air navigation.

Because the Master Reuse Plan would increase the number of nonconforming buildings at the CDCR property, and would result in the construction of two 35-foot-tall observation towers, five 35-foot-tall pole-mounted lights, and a lethal electrified fence, the Master Reuse Plan may be incompatible with the ALUP and could expose CDCR property occupants and aircraft to airport-related safety hazard. This impact would be ***potentially significant*** *(Impact 4.6-3).*

4.6.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impact was identified as less than significant, and therefore no mitigation is required:

4.6-1: Creation of Hazards to the Public or the Environment through the Routine Use, Transport, or Disposal of Hazardous Materials

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as potentially significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below:

Mitigation Measure 4.6-2: Exposure of Construction Workers and the Environment to Hazardous Materials

Before any grading, construction, demolition, or renovation activities, CDCR will implement the following measures to address potentially contaminated soils and building materials on the CDCR property:

- Prepare a soil management plan that will include a site health and safety plan and other aspects, which could include but are not limited to a description of the distribution of known and potential soil contaminants, methods of containing contaminated soil, and procedures for the management and disposal of waste soils generated during construction activities. The plan will outline measures that will be employed to protect construction workers and the public from exposure to hazardous materials during demolition, renovation, and construction activities. The soil management plan will be reviewed and approved by a Certified Industrial Hygienist before the start of earth-moving activities, and implemented by the selected contractor. (RWQCB, DTSC).
- In the event that contaminated groundwater is encountered during site excavation and construction activities, direct CDCR's contractor to report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminate before discharge in the sanitary sewer system. The contractor will be required to comply with all applicable federal, state, and local laws and regulations.
- In the event that contaminated soil is encountered during construction, complete soil removal activities in accordance with state and local regulatory requirements. CDCR will contact DTSC to discuss the findings and approach for remediation. Typically, DTSC requires a contractual arrangement (voluntary cleanup agreement) to fund its oversight costs during the removal action. If required by DTSC, CDCR will prepare a work plan for conducting additional investigations and will prepare a remedial action work plan before contaminated soil is excavated. The plan will outline measures for specific handling and reporting procedures for hazardous materials, and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility. The contractor will be required to comply with the plan and applicable federal, state, and local laws and regulations.
- In the event of discovery of an undocumented or previously unknown UST or agricultural structure (e.g., wells) on the CDCR property, cease all construction activities adjacent to the UST or structure and contact the City of Paso Robles Department of Emergency Services immediately. Any USTs or agricultural structures discovered during construction will be removed and any contaminated soils will be excavated and treated according to City of Paso Robles Department of Emergency Services procedures before the resumption of construction.
- Before demolition or renovation of any structures, test materials to be removed for the presence of asbestos and lead. Any lead-containing paint and asbestos-containing material encountered will be removed according

to federal, state, and local regulations, including appropriate notification, equipment, handling, and disposal. Consistent with the requirements of the SLOAPCD, friable asbestos-containing material will be properly disposed of as asbestos waste in accordance with applicable air quality regulations.

- If loose and peeling paint is encountered during demolition or renovation, conduct sampling and analysis for leachable lead content to characterize the waste. As required by 8 CCR 1532.1, CDCR will provide monitoring of lead in the air, adaptive work practices, and respiratory protection to avoid exposure to the presence of even very low levels of lead where the lead is loose and peeling.
- Prepare a toxics management plan that will include a site health and safety plan and other aspects, which could include but will not be limited to a description of the distribution of known and potential PCBs, methods of containing PCB-contaminated materials, and procedures for the management and disposal of PCB-related waste generated during construction activities. The plan will outline measures that will be employed to protect construction workers and the public from exposure to PCBs during demolition, renovation, and construction activities. The plan will be reviewed and approved by a Certified Industrial Hygienist before the start of grading, construction, demolition, or renovation activities, and implemented by the selected contractor. PCBs will be managed in accordance with applicable federal, state, and local laws and regulations.

Implementation of the Mitigation Measures 4.6-2 would reduce the likelihood of exposure of construction workers and the environment to potential sources of hazardous materials for the following reasons: preparation and implementation of a soil management plan would create specific remedial action measures such as removal of contaminated soil and replacement with clean fill dirt, which would reduce human exposure to contaminated soil; preparation and implementation of a toxics management plan would reduce human exposure to PCBs; additional analysis of loose or peeling paint during demolition and appropriate disposal practices in accordance with federal and state regulations would reduce exposure of construction workers to lead-based paint; and further investigation of the presence of asbestos in on-site structures as well as asbestos removal and disposal in accordance with applicable air quality regulations before demolition or renovation would reduce the likelihood of exposure of construction workers to asbestos. Implementing this mitigation measure would reduce the impacts to a less-than-significant level.

Mitigation Measure 4.6-3: Potential for Safety Hazards Associated with Proximity to Paso Robles Municipal Airport

Before approval of final project design plans, CDCR will notify the FAA in accordance with FAR Part 77, Section 77.17. CDCR will send one executed form set of FAA Form 7460-1, “Notice of Proposed Construction or Alteration” to the FAA regional office having jurisdiction over the project area. CDCR will also refer to the FAA’s Obstruction Evaluation/Airport Airspace Analysis Web site for additional information and guidance (https://oeaaa.faa.gov/oeaaa/external/portal.jsp). If the FAA obstruction evaluation determines that any project features constitute a hazard to air navigation, then CDCR will proceed through any required or recommended FAA regulatory approval process, and implement mitigation measures as required by the FAA. The FAA evaluation can result in a determination that a project structure:

- does not require notice to the FAA,
- is not identified as an obstruction under FAR Part 77 criteria,
- is identified as an obstruction but would not be a hazard to air navigation, or
- is identified as an obstruction and would be a hazard to air navigation.

Implementing this mitigation measure would reduce the impact to a less-than-significant level because all appropriate evaluations and notifications would be provided to the FAA and SLOALUC, and project facilities would be designed such that they would not create an obstruction to navigable airspace.

Significant Impacts That Would Remain Significant and Unavoidable

No hazards or hazardous material impacts were identified as significant and unavoidable.

4.7 HYDROLOGY AND WATER QUALITY

This section describes the existing hydrological setting for the CDCR property, including runoff, storm drainage, and flood control. Regulations and policies affecting local hydrology and water quality are discussed, and impacts are identified that may result from project implementation. Mitigation measures are recommended to reduce potential impacts, where appropriate. Impacts associated with water supply (including surface supplies and groundwater) are discussed in Section 4.12, "Utilities and Service Systems." Impacts associated with potential exposure of construction workers to contaminated groundwater are addressed in Section 4.6, "Hazards and Hazardous Materials."

4.7.1 EXISTING CONDITIONS

REGIONAL SETTING

The CDCR property is located within the jurisdictional limits of the City of Paso Robles (City), approximately 3 miles northeast of downtown, in the north central portion of San Luis Obispo County near the southern end of the Salinas Valley and in the southern portion of the Coast Ranges geomorphic province. The Coast Ranges geomorphic province consists of several elongated northwest-trending mountain ranges and narrow valleys that are approximately parallel to the coast of California. Rock units within the province are overlain by a variety of surficial units of Quaternary age. Late Pleistocene to early Holocene surficial sediments consisting of older river terraces of dissected alluvial gravels and sands underlie the site (Vanir 2010:5).

Paso Robles is located within the Salinas River watershed in the Central Coast Hydrologic Region. The river originates in San Luis Obispo County and flows northwesterly into Monterey County through the Salinas Valley and empties into Monterey Bay. The Salinas River drains a large watershed with a number of distinct tributaries. The main tributaries are the Arroyo Seco, Nacimiento, San Antonio, and Estrella Rivers. River flows are seasonal and are dictated by localized rainfall. The two primary groundwater basins within the watershed are the Salinas Valley Groundwater Basin and the Paso Robles Groundwater basin.

The Salinas River watershed has three dams, including one on the upper Salinas River south of Santa Margarita, one on the Nacimiento River, and one on the San Antonio River. Lands along the Salinas River in Paso Robles are within the dam failure inundation area for the Salinas Dam (San Luis Obispo County 2009). The concrete Salinas Dam has a capacity of 23,000 acre-feet, and is owned by the U.S. Army Corps of Engineers.

Paso Robles has a semiarid, Mediterranean climate characterized by long, hot, dry summers and brief, cool winters. Most of the precipitation occurs between the months of November and April. Precipitation on the Paso Robles Groundwater Basin area ranges from an annual average of 18 inches or more in the west to 5–8 inches in the eastern portion of the basin. Average annual precipitation near Paso Robles is about 14.57 inches; however, the area is subject to wide variations in annual precipitation (City of Paso Robles 2008:6). Summers in Paso Robles tend to be very hot, with daily temperatures frequently exceeding 100 degrees Fahrenheit (°F) from late June to early September. Winters are often very cool and moist, with daytime temperatures reaching into the low 50s°F. Because of the somewhat close proximity to the Pacific Ocean, the marine layer occasionally makes it over the Coast Ranges and into Paso Robles, creating fog.

AREA HYDROLOGY

The CDCR property is located in the upper Salinas River watershed. The Salinas River traverses south to north through Paso Robles, approximately 2 miles west of the CDCR property. The upper watershed begins at the headwaters of the Salinas River in the La Panza Range southeast of Santa Margarita Lake in San Luis Obispo County, and flows to the narrows area near Bradley in Monterey County. The upper watershed overlies the Paso Robles Groundwater Basin and lies mainly in San Luis Obispo County. Mean monthly flows for the Salinas River are commonly in excess of 400 cubic feet per second (cfs) from January through April. The river rarely contains

any measurable flow in June through November (City of Paso Robles 2010:2-2). Huerhuero Creek flows into the Salinas River approximately 2 miles north of the city (Exhibit 4.7-1).

The closest major waterways to the CDCR property are the Salinas River, located to the west, and Huerhuero Creek, located approximately one-quarter mile south and west of the CDCR property (Exhibit 4.7-1). The Salinas River is characterized by a wide range of flow conditions, and typically is dry from June into December. In addition, Dry Creek is an intermittent creek located southeast of the site. Huerhuero Creek, located approximately 0.3 mile south of the CDCR property, is an intermittent stream that meanders through undisturbed nonnative annual grassland located south of the CDCR property. The CDCR property is surrounded by relatively flat land that has historically been utilized for agriculture and the Paso Robles Municipal Airport.

DRAINAGE

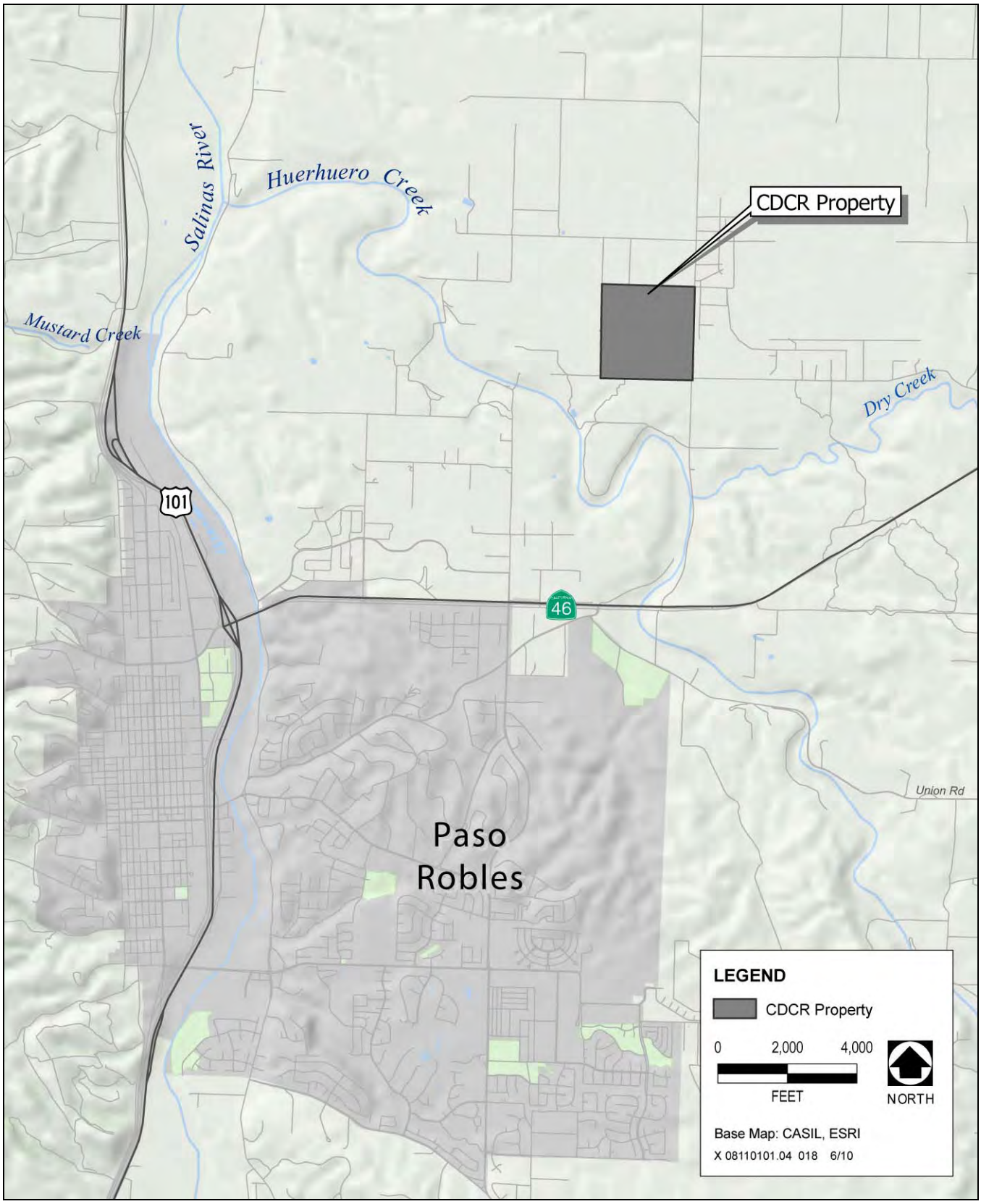
The CDCR property is located at an elevation of approximately 780–800 feet above mean sea level (msl). The site is characterized by relatively flat to gently rolling terrain, and in general slopes downward from east to west. There are no permanent natural surface water features on the CDCR property. Before the development of the CDCR property, a seasonal drainage meandered through the central and southeastern portion of the CDCR property (Vanir Construction Management 2010). Evidence of the seasonal drainage was no longer visible on aerials after the grading and construction of the former Division of Juvenile Justice (DJJ) facility (Vanir Construction Management 2010). However, some wetland features remain in the area, including a seasonal wetland and excavated drainage ditches. The seasonal wetland is supported in part by runoff from impervious surfaces associated with the existing facilities located north of Dry Creek Road. Surface water flows to a seasonal wetland in the southwestern portion of the site. Several excavated drainages provide site drainage for the existing facilities. Stormwater runoff on the CDCR property and vicinity generally drains in a westerly direction into open drainage swales and ditches that traverse through and around developed areas, agricultural fields and roadways. In general, stormwater runoff in the city is conveyed to the Salinas River and Huerhuero Creek (City of Paso Robles 2003:C-2). Groundwater flow directions and gradients were established for the southeastern portion of the CDCR property (i.e., the former DJJ facility). The shallow groundwater flow direction is generally to the southwest (Vanir 2010:8). Several drainage swales, ephemeral drainages, piped storm drain systems, and drainage culverts are located throughout the CDCR property (Exhibit 4.7-2). Large areas of open space and nonnative annual grassland on the CDCR property allow for infiltration of stormwater runoff. At several locations throughout the developed portion of the CDCR property, the existing drainages are crossed by roadways.

EXISTING FLOODING CONDITIONS

The 100-year flood refers to the flood resulting from a storm event which has a probability of occurring once every 100 years, or a 1% chance of occurring in any given year. Areas mapped in the 100-year floodplain area are subject to inundation during a 100-year storm event. The CDCR property lies outside of the designated 100-year floodplain (San Luis Obispo County 2008). In addition, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the CDCR property is not located within the 100-year or 500-year floodplain (Exhibit 4.7-3). Nearby areas within the 100-year floodplain are located along the Salinas River, Huerhuero Creek, and Dry Creek. Huerhuero Creek is located approximately one-quarter mile south and west of the CDCR property, and Dry Creek is approximately one-half mile to the southeast.

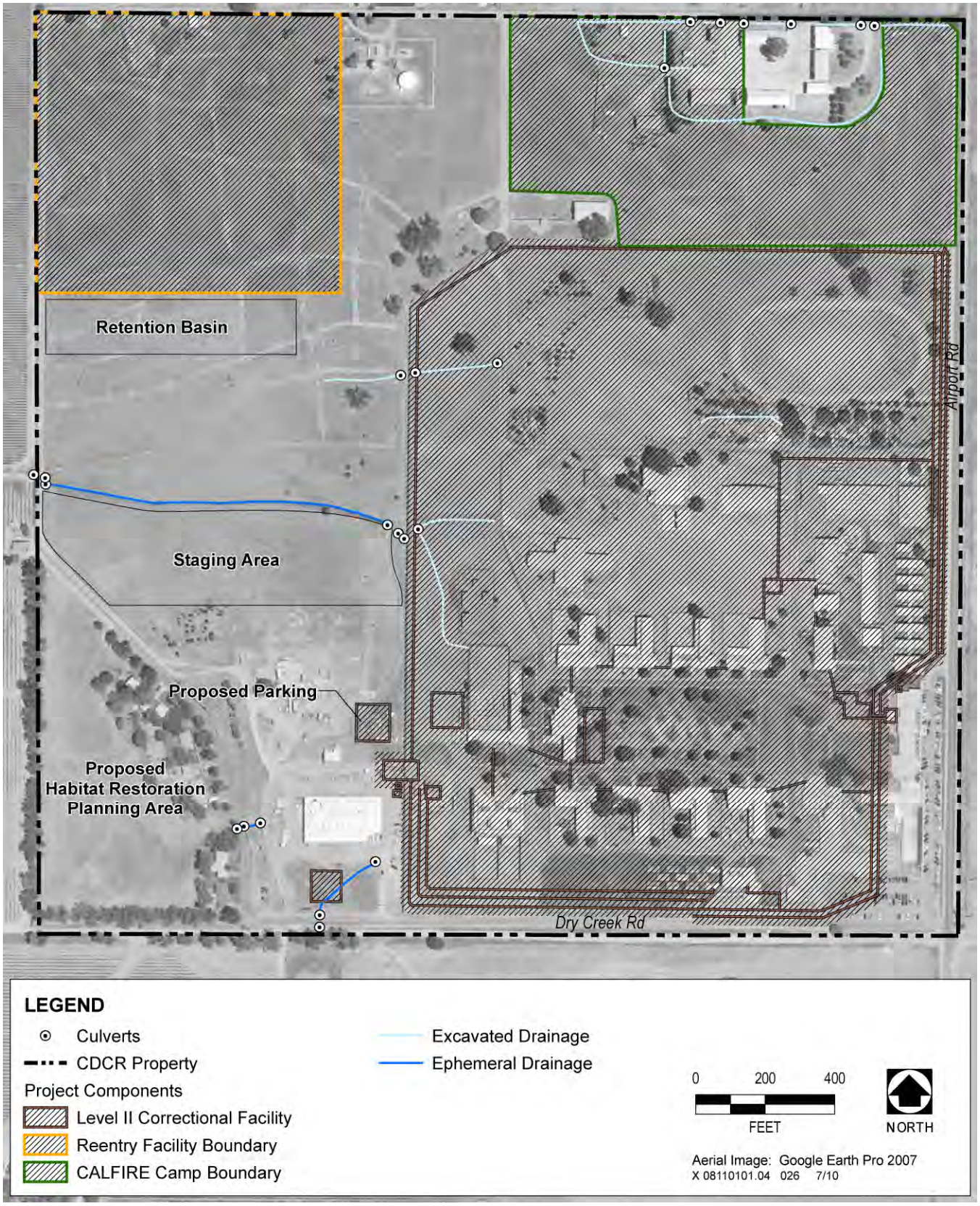
SURFACE WATER QUALITY

The quality of surface water on the CDCR property and surrounding area is affected by past and current land uses at the site and in the surrounding watershed. No monitoring data or information exists to characterize the typical stormwater surface runoff water quality onsite. Available monitoring data, although not exhaustive, indicate that water quality impacts in the Salinas River watershed are widespread and are primarily associated with agricultural land uses and groundwater pumping. Water quality impacts identified by the Central Coast



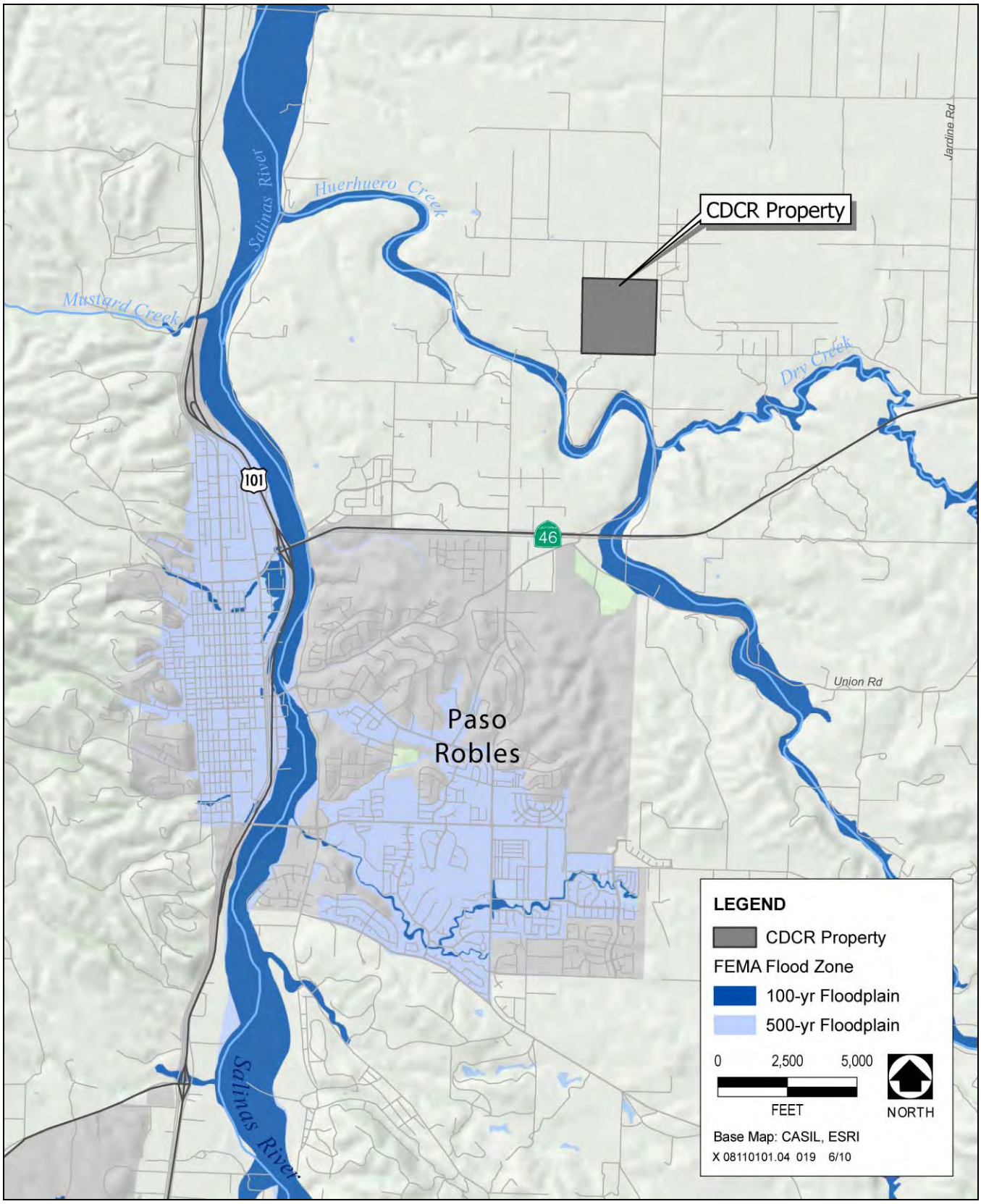
Source: Prepared by AECOM in 2010

Hydrologic Setting **Exhibit 4.7-1**



Source: Prepared by AECOM in 2010

CDCR Property Drainage Facilities **Exhibit 4.7-2**



Source: FEMA 1996; prepared by AECOM in 2010

Project Area 100-Year Floodplain Map **Exhibit 4.7-3**

Regional Water Quality Control Board (RWQCB) include seawater intrusion in the coastal areas near Castroville and Salinas, nitrates in groundwater and surface water, pesticides in sediment and animal tissues, mercury in Lake Nacimiento and its tributaries, and erosion and sedimentation. Pollutants such as pesticides, nutrients, and sediment are often associated with agricultural activities, although agriculture is not the only source. Other pollutant sources in the watershed are urban stormwater runoff, mines, oil fields, geothermal areas, roads and highways, and point-source discharges (City of Paso Robles 2010:2-3).

The Salinas River and several tributaries have been listed by the Central Coast RWQCB on the Clean Water Act Section 303(d) list of impaired water bodies. Pollutants currently listed include nutrients, pesticides, salinity/total dissolved solids/chlorides, and sedimentation/siltation. Impaired water bodies are those waters that do not fully support all of their designated beneficial uses. All water bodies on the 303(d) list are scheduled for development and implementation of total maximum daily loads (TMDLs). Developing and implementing a TMDL is a process that includes identification of sources and allocation of load reductions needed to restore beneficial uses (City of Paso Robles 2010:2-3). The only impaired water body within Paso Robles is the upper portion of the Salinas River. Sources of impairment include chloride and sodium potentially from agriculture, pasture grazing, and/or upland urban runoff/storm sewers (SWRCB 2007).

The City has identified four pollutants of concern (Table 4.7-1). Reducing these pollutants in water bodies within Paso Robles is one of the goals of the stormwater management plan (City of Paso Robles 2010:2-4).

Table 4.7-1
City of Paso Robles Pollutants of Concern

Pollutant	Possible Source
Chloride	Agriculture
Nutrients	Agriculture, residential uses
Sedimentation/siltation	Agriculture, construction sites, unvegetated slopes
Sodium	Agriculture

Source: City of Paso Robles 2010:2-4

GROUNDWATER

The City relies on local water supplies from the Salinas River underflow and the Paso Robles Groundwater Basin for its municipal water supply. Salinas River underflow refers to shallow subterranean flows in direct connection with the Salinas River. This underflow is subject to appropriative water rights and permitting by the State Water Resources Control Board (SWRCB). Salinas River underflow is replenished by surface water flows of the Salinas River and its tributaries.

The Paso Robles Groundwater Basin encompasses about 790 square miles in San Luis Obispo County and southern Monterey County. The Paso Robles Groundwater Basin is the water-bearing portion of the upper Salinas River drainage area. The drainage area covers 1,980 square miles and extends from the Nacimiento River in Monterey County to south of the Salinas Reservoir (Santa Margarita Lake). The Salinas River system, consisting of the Salinas River and tributaries, drains the basin area and flows north along the western edge of the drainage area. The drainage area is a large valley surrounded by mountainous or hilly terrain. The drainage divides are the Santa Lucia Mountains to the west, La Panza Range to the south, and Diablo and Temblor ranges to the northeast.

The major aquifers (or water-bearing units) in the basin include alluvial deposits and the Paso Robles Formation. The alluvial deposits are up to 100 feet in depth and include geologically recent stream-laid sands and gravels along the floodplains of the Salinas River and its tributaries, and older finer grained terrace deposits along the Salinas River and Estrella River. The Paso Robles Formation is the most extensive aquifer and consists of

sedimentary layers extending from the surface to depths of more than 2,000 feet. It is typically unconsolidated and generally poorly sorted. The water bearing sediments in the basin are 700–1,200 feet thick and typically extend to sea level. Paso Robles Formation sediments are relatively thin, often discontinuous sand and gravel layers interbedded with thick layers of silt and clay. The Paso Robles Formation provides percolating groundwater to the City.

Groundwater in the basin flows generally to the northwest; however, flow from the Cholame Hills is toward the southwest and flow along the Salinas River is to the north. Groundwater flow directions and gradients were established for the southeastern portion of the CDCR property. Shallow groundwater generally flows to the southwest, and deep groundwater generally flows north to northwest (California Department of General Services 2009:5).

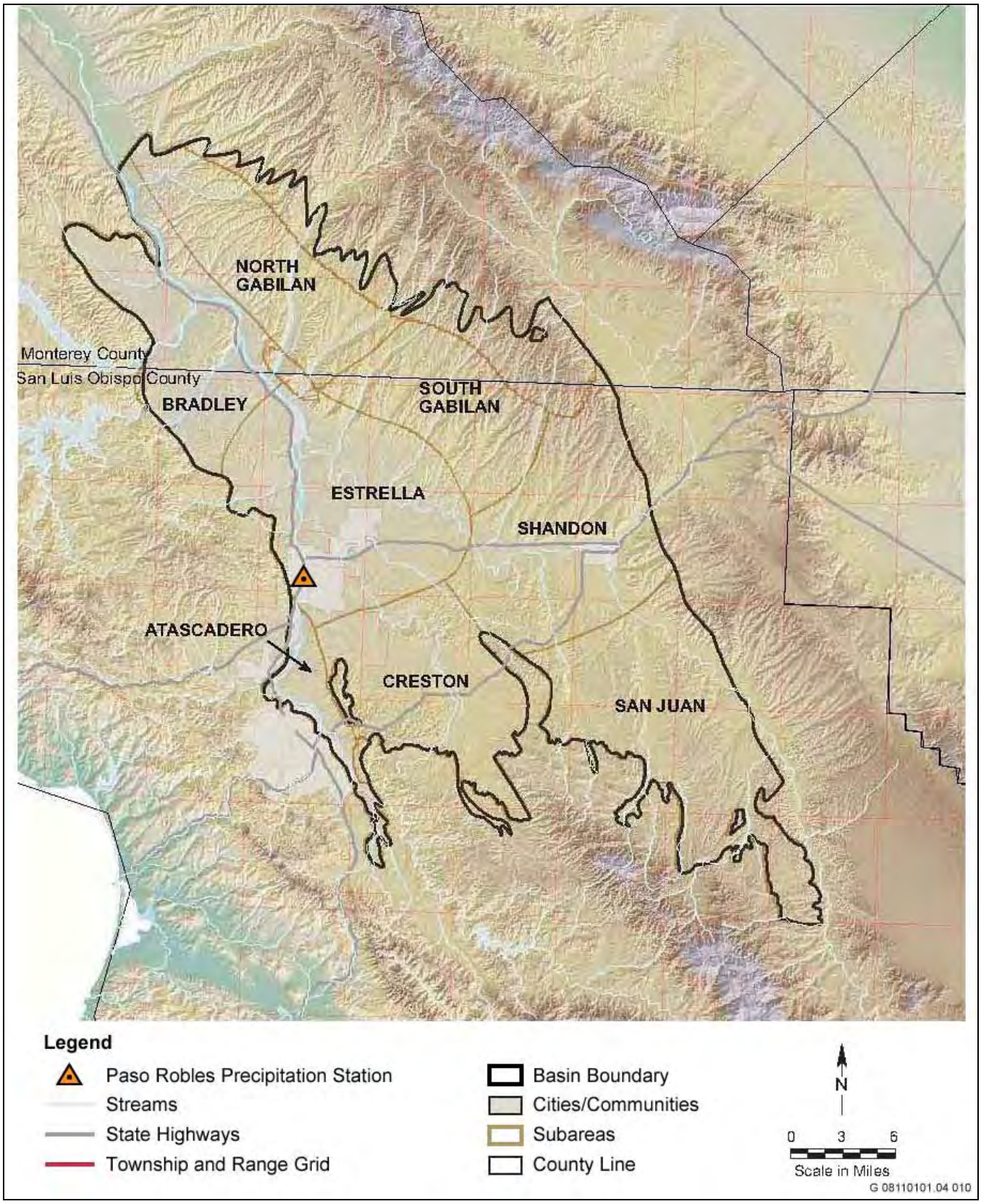
Although the basin as a whole is not in overdraft, substantial groundwater storage declines have occurred in the Estrella subarea, which includes most of the city. Increases in municipal, agricultural and rural pumping could result in additional localized groundwater level declines and the potential for basinwide overdraft (City of Paso Robles 2008:ES-1). The groundwater basin is shared among many users, including rural users, municipalities, and agriculture. The City and San Luis Obispo County are leading the preparation of a groundwater management plan (GMP) for the Paso Robles Groundwater Basin. The GMP will address groundwater conditions, identify local and basinwide groundwater issues, and outline voluntary measures to protect groundwater resources within the plan area. A draft GMP is scheduled for release in November 2010, with the final GMP expected in February 2011 (City of Paso Robles 2009:1).

The City pumps groundwater from the Paso Robles Groundwater Basin and Salinas River underflow from 19 active wells distributed throughout the service area. Five of these wells are located south of State Route (SR) 46 East, and seven are north of SR 46 East, primarily in the airport area (City of Paso Robles 2009:1). The City is also utilizing seven wells that pump water from the Salinas River underflow. Between 1995 and 2002, use of percolating groundwater from the City's basin wells ranged from 1,385 acre-feet per year (afy) to 3,789 afy. In 2007, the City pumped about 4,103 acre-feet of water from basin wells (City of Paso Robles 2008:13). Thunderbird 10 is a 210-foot-deep well along the Salinas River that derives its yield mainly from Salinas River underflow. Groundwater levels in the underflow wells have been relatively steady, reflecting recharge from the Salinas River. Paso Robles Groundwater Basin wells are represented by the Sherwood 9 and 11 wells, located in the southeastern portion of the city, and the Butterfield 12, Dry Creek 18, and Tarr 19 wells in the northeastern portion of the city near the airport. Groundwater levels in these wells have declined over time. These basin wells reflect the groundwater level declines in the Estrella subarea resulting from intensive local municipal and agricultural pumping (City of Paso Robles 2009:14).

Measured groundwater elevations were recorded for shallow wells and deep wells in the southeastern portion of the CDCR property. Groundwater elevations at the shallow well locations were approximately 25–30 feet below existing site grades, and groundwater elevations at the deep well locations were approximately 45–50 feet below existing site grades. Groundwater was not encountered within borings performed at the northwestern portion of the CDCR property at an exploration depth of approximately 40 feet below existing grades. It is likely that groundwater elevations on the CDCR property will vary because of changes in site elevations, subsurface soil conditions, seasonal variations, and proximity to Huerhuero Creek. Perched water should be anticipated above cemented geologic materials and in cleaner sand layers exposed at various depths across the site (Vanir 2010:5-6). Impacts associated with water supply (including surface supplies and groundwater) are discussed in Section 4.12, "Utilities and Service Systems."

Groundwater Quality

Groundwater quality in the Estrella subarea is generally good to moderate for municipal use. The location of the Estrella subarea is shown in Exhibit 4.7-4. Total dissolved solids (TDS) is a measure of the general mineral quality of water, and is commonly used to assess water quality. For municipal purposes, TDS should be less than



Source: Todd Engineering 2007; prepared by AECOM in 2010

Paso Robles Groundwater Basin and Subareas **Exhibit 4.7-4**

the 500 parts per million (ppm) recommended secondary maximum contaminant level (MCL), but can be usable up to the 1,000-ppm upper-value secondary MCL. Drinking-water standards include primary and secondary drinking-water standards. Drinking-water contaminant levels are reported as MCLs, which are legally enforceable standards based on health risk or nonhealth concerns (such as taste or odor).

In Paso Robles Groundwater Basin wells, TDS concentrations generally range from 300 to 1,000 ppm. Between 1998 and 2001, TDS concentrations ranged from 160 to more than 2,000 ppm and averaged 550 ppm in the Atascadero subbasin, 490 ppm in the Creston area, 750 ppm in the San Juan area, and 600 ppm in the Shandon area. Wells screened along the Salinas River in the recent alluvium generally have TDS concentrations between 300 and 800 ppm, reflecting the quality of stream recharge water. Wells screened in the Paso Robles Formation have generally good quality water, although a few isolated pockets exist and have poor quality water with TDS concentrations exceeding 1,000 ppm. TDS concentrations in Paso Robles City wells average about 475 ppm while basin wells average about 650 ppm (City of Paso Robles 2008:14).

The *Paso Robles Groundwater Basin Study* (Fugro 2002) reviewed available water quality data and identified deteriorating water quality trends. These include increasing TDS and chloride in the shallow Paso Robles Formation in the central portion of the Atascadero subbasin (southwest of the city along the Salinas River) and near San Miguel (see Exhibit 4.7-4), and increasing nitrate south of San Miguel and north of SR 46 between the Salinas River and Huerhuero Creek. In general, city water quality is good, but has relatively high TDS and hardness. In response to the hardness, many residents use home water softeners. However, use of water softeners results in addition of salts to the city's wastewater, which is treated and discharged to the groundwater basin. This locally increases TDS and chloride in groundwater. The situation may be improved in the future with the introduction of Lake Nacimiento water because Lake Nacimiento surface water is lower in hardness and TDS than groundwater (City of Paso Robles 2008:14).

The former DJJ facility is currently undergoing verification monitoring for hydrocarbon-contaminated groundwater. Unleaded gasoline was previously dispensed from several underground storage tanks (USTs) at the facility. Four USTs that reportedly contained unleaded gasoline were removed from the site in 1997. Analytical results from soil samples collected at the time of the UST removal indicated that one of the USTs had leaked and required further investigation to address the presence of petroleum-contaminated soil in the vicinity of the USTs. Groundwater monitoring wells were installed to monitor petroleum contamination. Approximately 2,000 cubic yards of petroleum hydrocarbon-contaminated soil was removed from the UST excavation area to a depth of about 25–30 feet below ground surface (bgs) in 2003. Twelve monitoring wells currently exist at the site for the purpose of monitoring petroleum contamination. Nine of the wells are screened in the shallow water bearing unit, and three are screened in the deeper water bearing unit.

Groundwater monitoring has been conducted in the southeastern portion of the CDCR property since January 2000. Total petroleum hydrocarbons (TPHg) and the fuel oxygenate methyl tertiary-butyl ether (MTBE) were both detected in concentrations greater than 30,000 micrograms per liter (µg/L) in Monitoring Well 6 (MW-6) in May 2003. Since that time, the concentrations of these chemicals in collected groundwater samples have dropped substantially. MTBE is now the only chemical at the site detected at significant concentrations. In general, MTBE concentrations at the site have declined considerably since 2004. Groundwater analysis conducted by Tetra Tech based on second-quarter 2009 sampling found that MTBE concentrations remain above the primary MCL drinking-water standard for MTBE of 13 parts per billion (ppb). The maximum concentration of MTBE detected in onsite groundwater from the August 2008 to May 2009 groundwater monitoring event was 370 ppb. Concentration of MTBE was greater than 30,000 ppb/µg/L in 2003. According to the 2009 groundwater monitoring report, it is Tetra Tech's opinion that "the existing MTBE concentrations do not justify active remediation or a monitoring frequency of greater than once per year" (California Department of General Services 2009:3-6). See Section 4.6, "Hazards and Hazardous Materials" for additional information.

4.7.2 REGULATORY BACKGROUND

Numerous federal, state, and local laws, regulations, and policies define the framework for regulating water quality in the project area. Water quality in California is regulated through the federal Clean Water Act (CWA), which is managed by the U.S. Environmental Protection Agency (EPA), with implementation delegated to the SWRCB and nine RWQCBs. Water quality at the CDCR property is regulated primarily by the Central Coast RWQCB. The following provides a description of the water quality requirements applicable to the project. Flood protection guidance is provided primarily by FEMA and is implemented at the state and local levels through legislation and local flood protection ordinances. State regulations applicable to the demonstration of adequate water supply for the future water demands resulting from implementation of the proposed project are addressed in Section 4.12, "Utilities and Service Systems."

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Clean Water Act

Overview

The CWA is the primary federal statute governing the protection of water quality and was established to provide a comprehensive program to protect the nation's surface waters. EPA is the federal agency with primary authority for implementing regulations adopted pursuant to the CWA. The basis of the CWA consists of the federal Water Pollution Prevention and Control Act (Water Pollution Act) passed in 1948. The Water Pollution Act was substantially reorganized and expanded in subsequent amendments passed in 1972 and in 1977, when "Clean Water Act" became its common name. The Water Pollution Act required the EPA to establish nationwide effluent standards on an industry-by-industry basis. The 1972 amendment established the National Pollutant Discharge Elimination System (NPDES) program. As a result of the reauthorization of the CWA in 1987, Sections 402(p) through 405 were added. One of the results of the new sections was the creation of a framework for regulating discharges under the NPDES permit program, which is discussed later in this section.

Under federal law, EPA has published water quality regulations under Volume 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question, and (2) criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. EPA has designated the SWRCB and its nine RWQCBs with the authority to identify beneficial uses and adopt applicable water quality objectives. EPA has delegated to the State of California the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act), described below.

Section 303(d) List of Impaired Water Bodies

Section 303(d) of the CWA requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) list, to EPA periodically. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment, and establishes a priority for developing a control plan to address the impairment. On June 28, 2007, EPA gave final approval to California's 2006 Section 303(d) List of Water Quality Limited Segments. The Salinas River and several tributaries have been listed by the Central Coast RWQCB. Pollutants currently listed include nutrients, pesticides, salinity/total dissolved solids/chlorides, and sedimentation/siltation.

Safe Drinking Water Act

Under the Safe Drinking Water Act (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supply. Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA's primary and secondary MCLs, which are applicable to treated water supplies delivered to a distribution system. MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting MCLs for drinking water.

EPA has delegated to the California Department of Public Health (CDPH) the responsibility for administering California's drinking-water program. CDPH is accountable to EPA for program implementation and for adopting standards and regulations that are at least as stringent as those developed by EPA. The applicable state primary and secondary MCLs are set forth in Title 22, Division 4, Chapter 15, Article 4 of the California Code of Regulations.

Federal Emergency Management Agency

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. FEMA administers the NFIP to provide subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains. FEMA also issues FIRMs that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. FEMA has established a minimum level of flood protection for new development as the 1-in-100 Annual Exceedance Probability (i.e., 100-year flood event). Participants in the NFIP must satisfy certain mandated floodplain management criteria. Flood zone areas in the vicinity of the proposed project are shown in Exhibit 4.7-3. The City of Paso Robles participates in the NFIP.

STATE OF CALIFORNIA PLANS, POLICIES, REGULATIONS, AND LAWS

Title 22 Standards

Water quality standards are enforceable limits composed of two parts: (1) the designated beneficial uses of water and (2) criteria (i.e., numeric or narrative limits) to protect those beneficial uses. Municipal and domestic supply (MUN) is among the "beneficial uses" as defined in Section 13050(f) of the Porter-Cologne Act, which defines them as uses of surface water and groundwater that must be protected against water quality degradation. Maximum contaminant levels, MCLs, are components of the drinking water standards adopted by CDPH pursuant to the California Safe Drinking Water Act. California MCLs may be found in Title 22 of the California Code of Regulations (CCR), Division 4, Chapter 15, Domestic Water Quality and Monitoring. CDPH is responsible for CCR Title 22 (Article 16, Section 64449) as well, which also defines secondary drinking-water standards, established primarily for reasons of consumer acceptance (i.e., taste) rather than because of health issues.

Drinking-water MCLs are directly applicable to water supply systems "at the tap" (i.e., at the point of use by consumers in their home, office, and other locations), and are enforceable by CDPH. California MCLs, both primary and secondary, are directly applicable to groundwater and surface water resources when they are specifically referenced as water quality objectives in the pertinent water quality control plan (basin plan). In such cases, MCLs become limits enforceable by the SWRCB and RWQCBs. When fully health protective, MCLs may also be used to interpret narrative water quality objectives prohibiting toxicity to humans in water designated as a source of drinking water (MUN) in the basin plan.

Porter-Cologne Water Quality Control Act of 1969

The Porter-Cologne Act of 1969 is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the SWRCB and nine RWQCBs to adopt and periodically update basin plans. Basin plans are the regional water quality control plans required by both the CWA and Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California.

The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities through the filing of reports of waste discharge (RWD) and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have the authority to issue waivers to RWD/WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB and nine RWQCBs are responsible for ensuring implementation and compliance with the provisions of the CWA and the Porter-Cologne Act. Along with the SWRCB and RWQCBs, water quality protection is the responsibility of numerous water supply and wastewater management agencies, as well as city and county governments, and requires the coordinated efforts of these various entities.

The *Water Quality Control Plan for the Central Coast Region* (Central Coast RWQCB 1994) defines the beneficial uses, water quality objectives, implementation programs, and surveillance and monitoring programs for waters of the Central Coast region. State law defines beneficial uses as "domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (California Water Code Section 13050[f]). This basin plan contains specific numeric water quality objectives that are applicable to certain water bodies or portions of water bodies. Objectives have been established for bacteria, dissolved oxygen, pH, pesticides, radioactivity, temperature, turbidity, and sediment.

NPDES Permit System and Waste Discharge Requirements for Construction

The 1972 amendment to the CWA established the NPDES permit program. The NPDES permit program outlined in the CWA contains effluent limitation guidelines, water quality requirements, and permit program requirements for discharges to waters of the United States. EPA has overall responsibility for the NPDES program, but administration of the program in California has been delegated to the SWRCB and the nine RWQCBs.

The 1987 amendment to the CWA established a framework for regulating discharges under the NPDES program. In 1990, EPA promulgated regulations for permitting stormwater discharges from industrial sites, including construction sites that disturb 5 acres or more, and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. The November 16, 1990 regulations, known as the Phase I regulations (Title 55 [FR] 47990), rely on NPDES permit coverage to address stormwater runoff from operators of medium and large MS4s, construction activity disturbing 5 acres of land or greater, and 10 categories of industrial activity.

On December 8, 1999, EPA promulgated regulations known as Phase II. The regulations set forth in the Storm Water Phase II Final Rule (Volume 64 *Federal Register* 68722) require permit coverage for discharges from small municipalities, including nontraditional small MS4s, which are governmental facilities (such as military bases, public campuses, and prison and hospital complexes) and from construction sites disturbing at least 1 acre of land. Phase II is intended to further reduce adverse impacts on water quality in receiving waters and aquatic habitats by instituting controls on the unregulated sources of stormwater discharges that have the greatest likelihood of continued environmental degradation. The goal of the NPDES nonpoint source regulations is to

improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of best management practices (BMPs). The focus of the Phase II program is the implementation of the following six minimum control measures: public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, postconstruction runoff control, and pollution prevention and good housekeeping.

Under Phase II regulations in California, small MS4s are covered under SWRCB Water Quality Order No. 2003-0005–Division of Water Quality (DWQ), NPDES General Permit No. CAS000004 (Small MS4 Permit). The City of Paso Robles stormwater management plan (SWMP) addressing the NPDES Phase II permit requirements is described below.

Construction projects disturbing at least 1 acre of land are covered under the General Construction Permit: SWRCB Water Quality Order No. 99-08-DWQ, NPDES General Permit No. CAS000002. Compliance with the NPDES General Construction Permit requires that any construction activity affecting 1 acre or more obtain the General Construction Activity Storm Water Permit. Permit applicants are required to submit a notice of intent (NOI) to the SWRCB and to prepare a storm water pollution prevention plan (SWPPP). The SWPPP identifies BMPs that must be implemented to reduce construction effects on receiving water quality. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. Examples of construction BMPs identified in SWPPPs include using temporary mulching, seeding, or other stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw wattles or silt fencing, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. The permit also requires dischargers to consider the use of postconstruction permanent BMPs that will remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements.

On September 2, 2009, the SWRCB adopted important changes to Order No. 99-08-DWQ. The revised general permit (Order No. 2009-0009-DWQ) will go into effect on July 1, 2010. The revised permit contains technology-based numeric action levels and numeric effluent limitations for pH and turbidity and imposes additional minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance. Effluent monitoring and reporting for pH and turbidity in stormwater discharges is required in order to determine compliance with the numeric effluent limitations and evaluate whether numeric action levels included in the General Permit are exceeded. The revised General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of El Paso de Robles General Plan 2003

The following policy from the Conservation Element of the *City of El Paso de Robles General Plan 2003* relating to hydrology and water quality could be applicable to the Paso Robles Property Master Reuse Plan.

- **Policy C-1C:** Storm Drainage. Provide storm drain systems that efficiently and safely mitigate flood risk, while effectively conveying run-off to the Salinas River and Huerhuero Creek.

City of Paso Robles Storm Water Management Plan

To meet stormwater management permitting requirements, the City of Paso Robles prepared a SWMP. The SWMP is consistent with NPDES Phase II permit procedures and is designed to enable the city to meet CWA stormwater requirements. Regulations and requirements for construction-site stormwater runoff control, postconstruction stormwater management, and pollution prevention for municipal operations are included in the SWMP (City of Paso Robles 2010).

The City's SWMP is a guidance document to be used by the City's regulatory body, contractors, and the general public. It is also an evolving program that will be monitored and revised as necessary in order to address changes in compliance programs or permit requirements. The City's SWMP defines strategies and guidelines for protection of water quality and reduction of pollutant discharges to the Maximum Extent Practicable (MEP) from all areas and facilities within the city.

The City of Paso Robles SWMP outlines a comprehensive program, consisting of six core program elements that require numerous BMPs with measurable goals to reduce or eliminate stormwater pollution to the maximum extent practicable. The six elements of the SWMP are:

- Public Education and Outreach,
- Public Participation and Involvement,
- Illicit Discharge Detection and Elimination,
- Construction Site Stormwater runoff Control,
- Postconstruction Storm Water Management in New and Redevelopment Areas, and
- Pollution Prevention and Good Housekeeping for Municipal Operations.

Regarding postconstruction stormwater management, the City has experienced growth of more than 25% in recent years and, therefore, is defined by the Central Coast RWQCB as a "high growth area." As a high growth area, the City must incorporate Attachment 4 of the NPDES Phase II General Permit (Order 2003-0005-DWQ) into the SWMP. Attachment 4 includes receiving water limitations and design standards. Implementation of the provisions in Attachment 4 will have the direct result of decreasing the impacts from new construction within the city on receiving waters.

City of Paso Robles Municipal Code

The following sections of the City of Paso Robles Municipal Code (1995) are applicable to the proposed project.

Title 14 – Water and Sewers

Chapter 14.06 – Regulation of Well Construction, Repair, Modification, and Destruction

14.06.010 - Purpose.

A. The city is dependent upon the water supplied from wells drawing from the Paso Robles formation and from the underflow in the Salinas River. These wells constitute the city's sole source of water supply and their aquifers must be protected against overdraft and contamination so that the city may continue to provide the necessary volume of potable water to its citizens within the health and welfare guidelines promulgated by the various state and federal regulatory agencies.

14.06.040 - Permits.

No person, firm, corporation, or special district formed under the laws of this state shall within the city, construct, repair, modify, or destroy any well unless such person possesses a valid permit issued by the department of public works as provided in this chapter. Any person, firm, corporation, or special district

refused or denied the issuance of a permit shall have the opportunity for an appeal as described under Section 14.06.050.

14.06.048 - Abandoned wells.

As a condition for obtaining a permit, any abandoned wells on the property shall be properly destroyed in conformance with the applicable standards for well abandonment.

4.7.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a hydrology or water quality impact is considered significant if implementation of the proposed project would do any of the following:

- violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality;
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial on- or offsite erosion or siltation;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding;
- create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or FIRM or other flood hazard delineation map;
- place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- result in inundation by seiche, tsunami, or mudflow.

ISSUES NOT DISCUSSED FURTHER IN THIS DEIR

Groundwater Depletion and Recharge

CDCR has proposed that potable water would be supplied to the proposed facilities by the City. The City currently relies on local water supplies from the Salinas River underflow and the Paso Robles Groundwater Basin for its municipal water supply. As described in Section 4.12, “Utilities and Service Systems,” the City intends to supplement its water supply with imported water from Lake Nacimiento and CDCR intends to participate in this importation project to supply the Master Reuse Plan. However, utilization of Lake Nacimiento water is contingent on several factors (see description in Section 4.12, “Utilities and Service Systems”) and if any of these factors are not fully implemented, CDCR would not be able to utilize Lake Nacimiento water. Therefore, two other alternative water supply options are analyzed in Section 4.12, “Utilities and Service Systems.” Please see Section

4.12, "Utilities and Service Systems," for a discussion of the Master Reuse Plan's impact on groundwater supply and the potential for contribution to potential overdraft conditions under each of these three water supply options.

Flooding

The CDCR property lies outside of the designated 100-year floodplain (San Luis Obispo County 2008). In addition, according to the FEMA FIRM for the project area, the CDCR property is not located within the 100-year or 500-year floodplain (Exhibit 4.7-3). Therefore, implementation of the Master Reuse Plan would not place housing in a 100-year flood hazard area or place structures in a 100-year flood hazard area that would redirect flood flows. Thus, these issues are not discussed further in this DEIR.

Lands along the Salinas River in Paso Robles are within the dam failure inundation area for the Salinas Dam (San Luis Obispo County 2009). The CDCR property is approximately 2 miles east of the Salinas River. No substantial evidence exists to suggest that dam or levee failure is likely, and the Master Reuse Plan would not increase the potential for dam or levee failure. Further, the CDCR property is substantially distant from the areas that would be subject to dam inundation or levee failure such that no significant flooding impacts would occur. Therefore, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a levee or dam failure. Thus, this issue is not discussed further in this DEIR.

Seiches, Tsunamis, and Mudflows

Because of the distance from the nearest open waterbody, the Pacific Ocean (approximately 17 miles to the southwest), and the elevation of the site (approximately 790 feet above msl), the Master Reuse Plan would not be affected by inundation as a result of seiche or tsunami. According to the *San Luis Obispo County General Plan* Safety Element, Landslide Hazards Map (San Luis Obispo County 1999), the CDCR property is in a low potential landslide hazard area with a slope gradient of less than 20%. In addition, the site is characterized by relatively flat to gently rolling terrain. Therefore, these issues are not addressed further in this DEIR.

PROJECT IMPACTS

Impact 4.7-1: Short-Term, Construction-Related Water Quality Degradation

Project implementation would include substantial construction activity, including soil removal, trenching, pipe installation, grading, and revegetation. Construction activities would create the potential for soil erosion and sedimentation of stormwater drainage systems, both within and downstream of the CDCR property. The construction process may also result in accidental release of other pollutants to surface waters, including oil and gas, chemical substances used during construction, waste concrete, and wash water. Many construction-related wastes have the potential to degrade existing water quality by altering the dissolved-oxygen content, temperature, pH, suspended-sediment and turbidity levels, or nutrient content, or by causing toxic effects in the aquatic environment. Proposed construction activities if not properly implemented could violate water quality standards or cause direct harm to aquatic organisms.

The probability that implementation of the Master Reuse Plan would cause localized erosion hazards is relatively low because the CDCR property is generally flat and the soil types on the site are relatively deep and well drained (see Section 4.5, "Geology and Paleontology," of this DEIR). However, intense rainfall and associated stormwater runoff could result in short periods of sheet erosion within areas of exposed or stockpiled soils. If uncontrolled, these soil materials could cause sedimentation and blockage of drainage channels. Further, the compaction of soils by heavy equipment may reduce the infiltration capacity of soils and increase the potential for runoff and erosion. Nonstormwater discharges could result from activities such as discharge or accidental spills of hazardous substances such as fuels, oils, concrete, paints, solvents, cleaners, or other construction materials. As a state agency, CDCR is required to comply with state regulations pertaining to the control of on-site stormwater,

including requirements of the RWQCB. These regulations require the preparation of a SWPPP and implementation of BMPs to control on-site erosion and protect water quality.

While construction activities during implementation of the Master Reuse Plan would involve extensive grading and movement of soil, could generate sediment, erosion, and other nonpoint source pollutants in on-site stormwater, which could drain to off-site areas degrading local water quality, CDCR would comply with Central Coast RWQCB regulations that require the preparation of a SWPPP and implementation of BMPs that protect water quality and minimize erosion. This impact would be ***less than significant*** *(Impact 4.7-1).*

Impact 4.7-2: Increase in Surface Runoff Potentially Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems

Implementation of the Master Reuse Plan would result in the addition of impervious surfaces (Exhibit 4.7-2). Approximately 14.5 acres of new pavement and buildings would be constructed. Topography across the site is gently rolling and in general slopes downward from east to west. Several drainage swales, ephemeral drainages, piped storm drain systems, and drainage culverts are located throughout the CDCR property (Exhibit 4.7-2).

Implementation of the Master Reuse Plan would result in impervious surfaces on land that is currently undeveloped nonnative annual grassland. Therefore, the Master Reuse Plan would substantially alter land use and drainage patterns. Although a formal hydrologic analysis of the site has not been performed, several preliminary drainage system design alternatives are being considered as part of the Master Reuse Plan:

- **Onsite Detention:** Within the CDCR property, many open spaces exist where shallow depressions can be constructed to act as detention basins for the increased runoff. Individual buildings, parking areas, roadway segments, and other project components can have a single shallow basin or series of shallow basins that collect rooftop and hardscaped runoff, detain the runoff, and deliver it to perimeter drainage swales. Necessary long-term maintenance would be identified.

- **Low-Impact Development (LID) Techniques:** Potential LID techniques may include pervious pavement, use of on-site water infiltration techniques, use of surface drainage systems (instead of using underground pipes), decentralized detention facilities, and rainwater cisterns. LID techniques can help to significantly reduce the size of necessary flood control facilities and minimize stormwater runoff pollution, stream erosion and sedimentation, and stream channel alteration resulting from conventional development practices.

Further, the reentry facility is being designed to meet U.S. Green Building Council, Leadership in Energy and Environmental Design (LEED®) Silver design standards, which incorporates measures to minimize stormwater generation. It is anticipated that any necessary onsite drainage improvements for the Estrella Adult Correctional Facility would be constructed primarily within areas that are already developed or disturbed. Further, it is anticipated that project-generated stormwater would be detained onsite such that the rate of flow from the detention basin would be limited to the rate that historically occurred prior to development." However, final plans have not been prepared at this time. Environmental impacts associated with construction of these improvements would generally consist of construction-related air quality (e.g., emissions of respirable particulate matter [PM_{10}]), noise, biological habitat (e.g., foraging, wetlands), and construction traffic impacts. Environmental impacts have been considered and evaluated throughout the environmental resource sections of this DEIR, and mitigation recommended for the Master Reuse Plan would substantially reduce construction-related impacts associated with these drainage improvements.

Because final drainage design specifications have not been completed, including stormwater flow paths based on a finalized Master Reuse site plan, implementation of the Master Reuse Plan has the potential to cause an increase in surface runoff that would exceed the capacity of the stormwater drainage system, resulting in on- and offsite flooding.

Implementation of the proposed Master Reuse Plan would increase the amount of impervious surfaces at the CDCR property, thereby increasing surface runoff. This increase in surface runoff would result in an increase in both the total volume and the peak discharge rate of stormwater runoff, and could result in exceeding the capacity of onsite stormwater systems and greater potential for on- and of-site flooding. Therefore, this impact would be ***potentially significant*** *(Impact 4.7-2).*

Impact 4.7-3: Long-Term Water Quality Degradation

Implementation of the Master Reuse Plan would increase the footprint of development at the CDCR property, adding substantial amounts of impervious surfaces (approximately 14.5 acres), including roadways and parking areas, which could potentially increase the level of urban contaminants discharged into the stormwater drainage system. Some of the currently undeveloped land on the CDCR property would be developed with permanent uses associated with the Master Reuse Plan, including buildings; perimeter roads and fences; and new parking lots. The proposed development has the potential to increase the pollutant load of stormwater discharges as a result of proposed land uses. Anticipated pollutants associated with the project include trash, debris, heavy metals, and hydrocarbons from parking areas. In addition, potential pollutants associated with the project include sediment from pervious areas that would not be landscaped, pesticides from potential pest control activities, nutrients, fertilizers, oxygen-demanding substances from landscaped areas, and organic compounds from uncovered parking areas and roadways.

In accordance with federal and state stormwater management regulations, new construction and significant redevelopment must maintain preproject hydrology and incorporate proper pollutant source controls, minimize pollutant exposure outdoors, and treat stormwater runoff through proper BMPs when source control or exposure protection are insufficient for reducing runoff pollutant loads. In accordance with Central Coast RWQCB compliance guidelines, CDCR would be required to incorporate BMPs and LID stormwater management principles. These would include detention systems and other suitable stormwater pollutant control BMPs to reduce the discharge of pollutants into stormwater to the maximum extent practicable.

The conversion of undeveloped land to urban land uses would alter the types, quantities, and timing of contaminant discharges in stormwater runoff. Overall, the potential for the Master Reuse Plan to cause or contribute to long-term discharges of urban contaminants (e.g., oil and grease, trace metals and organics, trash) into the stormwater drainage system could increase compared with existing conditions. CDCR would comply with federal and state stormwater management regulations and would incorporate appropriate BMPs into project design to prevent long-term water quality degradation. This would be a ***less-than-significant*** *impact (Impact 4.7-3).*

Impact 4.7-4: Groundwater Quality Degradation Associated with Improper Well Decommissioning

A Phase I Environmental Site Assessment (ESA) report was prepared for the northwest portion of the CDCR property in accordance with American Society of Testing and Materials (ASTM) Standard E 1527-05 (Vanir 2010). The report identifies an out-of-service water well located east of the proposed reentry site and adjacent to an onsite water treatment plant (Vanir 2010:3). The Phase I analysis does not identify any other abandoned or out-of-service water wells within the northwest portion of the property. If the above identified well and any other identified wells at the site are not used for potable or irrigation water, they would be decommissioned in accordance with State and San Luis Obispo County standards. CDCR, as a state agency, would properly decommission any onsite wells that would not be used for irrigation or other potable uses.

Because CDCR would properly decommission any onsite wells that would not be used for irrigation or other potable uses, this would be a ***less-than-significant*** *impact (Impact 4.7-4).*

4.7.4 PROPOSED MITIGATION MEASURES

Less-Than-Significant Impacts

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.7-1: Short-Term, Construction-Related Water Quality Degradation
Impact 4.7-3: Long-Term Water Quality Degradation
Impact 4.7-4: Groundwater Quality Degradation Associated with Improper Well Decommissioning

Significant Impacts that can be Mitigated to a Less-than-Significant Level

Mitigation Measure 4.7-2: Increase in Surface Runoff Potentially Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems

Before any construction-related ground disturbance, final drainage plans will be completed to demonstrate that all runoff would be appropriately conveyed through the CDCR property and would not leave the property at rates exceeding preproject runoff conditions. As part of the final design process, CDCR will coordinate with the City of Paso Robles to ensure that the proposed drainage plans are consistent with local requirements. The plan will include but not be limited to, the following items:

- an accurate calculation of preproject and postproject runoff scenarios, obtained using appropriate engineering methods that accurately evaluate potential changes to runoff, including increased surface runoff;
- a description of the proposed maintenance program for the onsite drainage system;
- installation of a drainage basin to accommodate onsite stormwater flows designed to be consistent with the requirements of the City of Paso Robles SWMP and provide enough storage to accommodate the difference between calculated 10-year storm peak run-off of the existing site and the 100-year storm runoff of the developed site; and
- a description of the project-specific standards for installing drainage systems.

Implementation of Mitigation Measure 4.7-2 would reduce the significant impact associated with increased surface runoff that would exceed the capacity of the stormwater drainage system, resulting in on- and offsite flooding to a less-than-significant level by providing adequate onsite storm drainage facilities to accommodate the Master Reuse Plan's stormwater demands and reducing runoff from the CDCR property to rates not exceeding preproject conditions.

SIGNIFICANT IMPACTS THAT WOULD REMAIN SIGNIFICANT AND UNAVOIDABLE

No hydrology and water quality impacts were identified as significant and unavoidable.

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4.8 LAND USE AND AGRICULTURAL RESOURCES

This section describes the existing onsite, and existing and planned surrounding land uses, and evaluates the project's potential effect on existing and planned land uses. As a state agency, CDCR must consider relevant federal or state land use policies. However, CDCR is exempt from plans, policies, and regulations adopted by agencies subordinate to the state. Nevertheless, CDCR has provided a discussion of relevant local plans and policies because conflicts with these policies could potentially result in environmental impacts. The discussion does not imply that CDCR would be subject to local plans or regulations, either directly or through the CEQA process.

4.8.1 EXISTING CONDITIONS

REGIONAL SETTING

The CDCR property is located in the north-central portion of San Luis Obispo County, within the city of Paso Robles (see Exhibit 3-3 in Chapter 3, "Project Description"). The city encompasses 20 square miles and is situated in the southern portion of the Salinas River Valley. The city is located in the Central Coast region of California, approximately 200 miles south of San Francisco and 200 miles north of Los Angeles. Regional access is provided via U.S. Highway 101 from the north and south. Access to the city from the Central Valley to the east is provided by State Route (SR) 46. Additionally, SR 46 connects the city to the Central Coast and U.S. Highway 1, which traverses the coastline of California between Los Angeles to the south and San Francisco to the north.

SR 46, particularly east of the downtown core, is an important community dividing line, with very different land uses north and south of the highway.

The site is located in the northeast area of the city, north of SR 46. The Paso Robles Municipal Airport is the dominant developed land use in the area. In addition to the airport, other dominant land uses in the general area of the site include business park and agriculture. Residential land uses are primarily located on the east side of the city, south of SR 46. The city is currently preparing three specific plans that would provide new housing opportunities on the west side of the city between 1st and 38th Streets and between the Salinas River and Vine Street, on the east side of the city generally north of Linne Road and south of Union Road and east of Golden Hill Road, and on the southeast side of the city generally south of Linne Road and north of Creston Road (City of Paso Robles 2009a: H-43). As of January 1, 2009, the city had 11,728 dwelling units (California Department of Finance 2009). The city anticipates a total of 14,572 dwelling units within the city limits by 2025 (City of Paso Robles 2005:LU-2).

Commercial land uses are located primarily in downtown Paso Robles, on Niblick Road west of South River Road, and along the west side of Theatre Drive south of SR 46. Industrial land uses are located primarily in the Commerce Industrial Park at Sherwood Road and Commerce Way, in the area centered on the intersection of SR 46 and Golden Hill Road, and on Ramada Drive north of SR 46. Commercial and industrial development is anticipated to total 6.9 and 3.6 million square feet, respectively, by 2025 (City of Paso Robles 2005:LU-2).

The Paso Robles Municipal Airport consists of 1,231 acres and is located at SR 46 East and Airport Road just east off U.S. Highway 101. The airport is located directly east of the CDCR property. The airport is a public-use general aviation airport owned and managed by the City of Paso Robles (City). The airport houses 165 aircraft and operates two asphalt landing strips: one 6,000 feet long that runs from northeast to southwest, and the other 4,700 feet long that runs from northwest to southeast, and one asphalt helipad (NavAir 2010). The airport averages 94 flights per day (NavAir 2010). The area immediately surrounding the Paso Robles Municipal Airport, known as Airport Road Industrial Park, includes aviation maintenance providers and facilities, aviation parts manufacturers, and other related businesses.

Agricultural uses within the city limits are concentrated north of SR 46 and north of the Paso Robles Municipal Airport. Wine grapes are the predominant agricultural crop grown within the city. The city contains 29,000 acres of vineyards that grow 35 varieties of grapes. More than 250 vineyards and 170 wineries are located throughout the rural portions of the city. In general larger vineyards are located in the northern and eastern portions of the city, while smaller boutique vineyards are concentrated in the southwest. Other agricultural lands within the city are used for rangeland; dry-farmed crops such as hay and oats; and irrigated crops such as olives, spinach, lettuce, almonds, and walnuts. Recently, spinach and lettuce production in the city has increased, particularly in the northeastern portion of the city near the Pas Robles Municipal Airport, because of the availability of low, flat land (City of Paso Robles 2009b:18).

EXISTING LAND USES

Project Site

The 160-acre CDCR property is located approximately 3 miles northeast of the center of the city at 4545 Airport Road. The site is bordered on the north by a paved service road, to the south by Dry Creek Road, to the east by Airport Road, and to the west by a service road and agricultural fields. The entire parcel is owned by CDCR.

The former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility is located in the south and southeastern portion of the CDCR property. The facility includes a combination of dormitories and two celled housing units, auditorium, gymnasium, outdoor recreational facilities, vocational school, library, infirmary, visitor's center, and maintenance building. Six state residences are located in the southwestern-central portion of the CDCR property.

The majority of the northern, northwestern, and western areas of the property has remained generally undeveloped, with the exception of the abandoned foundation remnants in the western portion of the property that were associated with the farm operations of the former correctional facility. The northeastern portion of the CDCR property is developed as an existing CAL FIRE facility. The facility consists of a living center, an outpatient housing unit, and classrooms.

Adjacent Land Uses

Adjacent land uses are shown in Exhibit 3-3 in Chapter 3, "Project Description." Land in the project area has been historically used for agriculture, with wine grapes as the primary agricultural product grown. Other agricultural uses are present, including irrigated farmland and pastureland. Land uses north of the CDCR property are characterized primarily by private vineyards and agricultural row crops. Rural residences with associated agricultural outbuildings are located south of Buena Vista Drive. The Paso Robles Wine Services is located north of Buena Vista Drive and offers a variety of wine processing, bottling, and storage services.

Vacant land directly south of the CDCR property across Dry Creek Road is planned for construction of a series of small-scale wineries that will include wine production, barrel storage, and wine tasting. Construction is anticipated to begin in December 2010 and be completed within 6 months (Paso Robles Press 2009).

The Paso Robles Municipal Airport is located directly east and northeast of the CDCR property across Airport Road and the southern end of the northeast to southwest landing strip is approximately 1,500 feet east of the CDCR property.

Land uses to the west of the CDCR property are in the unincorporated area of San Luis Obispo County and consist of private vineyards.

AGRICULTURAL RESOURCES

Approximately 1,012,411 acres of agricultural land are located in San Luis Obispo County. The county had 2,784 farms with an average size of 492 acres (U.S. Department of Agriculture 2007). Wine grapes are the primary type of agricultural product grown in the county, followed by broccoli, strawberries, lettuce, avocados, and celery.

Farmland Map Classifications

Of the 1,012,411 acres of agricultural land in San Luis Obispo County, approximately 270,407 acres were designated Important Farmland (as defined by the California Department of Conservation [DOC]) in 2006. As defined below in Section 4.8.2, "Regulatory Background," Important Farmland includes Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. In addition, Farmland of Local Importance can be further defined by each county based on its importance to the local economy (DOC 2008:88). The San Luis Obispo County (County) Agriculture Department has defined Farmland of Local Potential as being soils that qualify for Prime Farmland or Farmland of Statewide Importance, but that generally are not cultivated or irrigated (DOC 2008:91).

The total acreage of Important Farmland in the county consisted of 39,724 acres of Prime Farmland, 19,722 acres of Farmland of Statewide Importance, 36,411 acres of Unique Farmland, and 174,550 acres of Farmland of Local Importance (DOC 2008:54). Approximately 4,077 acres of Important Farmland are located within the city limits. This total includes 205 acres of Prime Farmland, 481 acres of Farmland of Statewide Importance, 304 acres of Unique Farmland, and 3,087 acres of Farmland of Local Importance (City of Paso Robles 2009:18).

Important Farmland is defined in Appendix G of the State CEQA Guidelines as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The San Luis Obispo County Important Farmland Map, published by the DOC's Division of Land Resource Protection, designates 60 acres of the CDCR property as Farmland of Local Potential and 101 acres as Urban and Built-Up Land (Exhibit 4.8-1). Therefore, the CDCR property does not include any Important Farmland as defined in Appendix G of the State CEQA Guidelines.

Williamson Act Contracts

Approximately 794,394 acres of land in San Luis Obispo County was under Williamson Act contracts in 2007 (DOC 2009:26). Of these lands, approximately 18,179 acres were in the nonrenewal process (DOC 2009:29). The nonrenewal process is the most common mechanism for termination of Williamson Act contract lands and most Williamson Act contracts are terminated through nonrenewal expiration.

As shown in Exhibit 4.8-1, approximately 229 acres east of the CDCR property within unincorporated San Luis Obispo County consists of agricultural lands under active Williamson Act contracts. No lands within the city limits are under Williamson Act contracts (City of Paso Robles 2009:38).

4.8.2 REGULATORY BACKGROUND

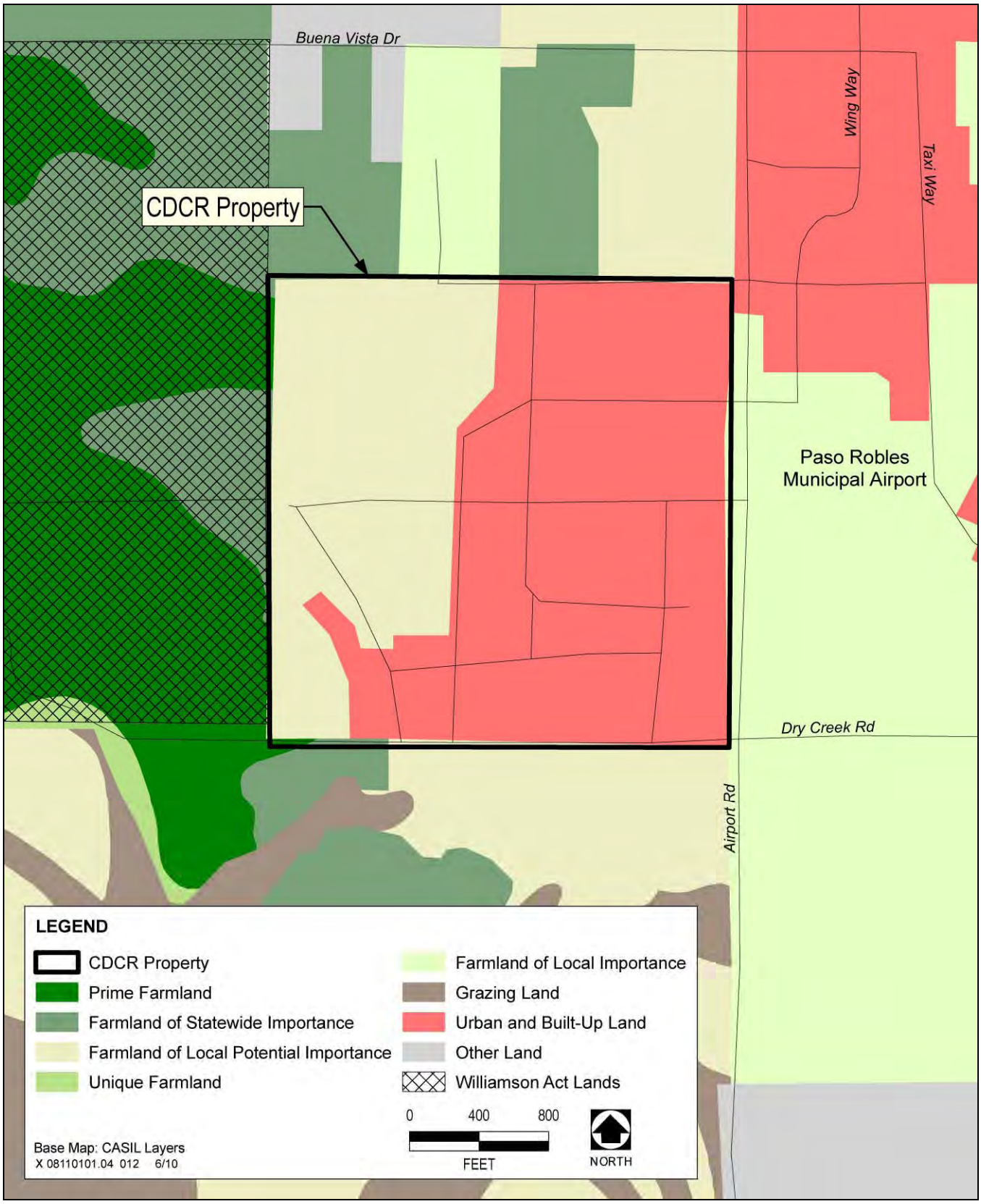
FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to land use apply to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

State Planning and Zoning Laws

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or



Source: FMMP 2006, Williamson Act 2005

Important Farmland Designations and Williamson Act Contract Lands **Exhibit 4.8-1**

county's judgment, bears relation to its planning. The general plan addresses a broad range of topics, including at a minimum land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area.

The State Zoning Law (California Government Code, Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the general plan.

Local general plan policies and zoning ordinances, as they relate to the CDCR property, are summarized below. The proposed project would be under the jurisdiction of CDCR (a state agency). State agencies are exempt (as established by *Hall vs. City of Taft* [1952] 47 Cal.App.2d 177) from complying with local or county plans, policies, or zoning regulations. Nevertheless, conflicts with nearby land uses that could be developed consistent with the plans could result in potentially significant environmental impacts. For these reasons, CDCR considers local land use policies and regulations when making land use planning decisions, but is not subject to complying with these policies and regulations.

California Important Farmland Inventory System and Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established by the State of California in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the Soil Conservation Service (SCS) (now Natural Resources Conservation Service [NRCS]). The intent of the SCS was to produce agricultural-resource maps based on soil quality and land use across the nation. DOC sponsors the FMMP and is also responsible for establishing agricultural easements in accordance with California Public Resources Code Sections 10250–10255.

As part of the nationwide effort to map agricultural land uses, NRCS uses a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classify the land's suitability for agricultural production. Suitability includes both the physical and chemical characteristics of soils as well as the actual land use. Maps of Important Farmland are derived from the NRCS soil survey maps using the LIM criteria and are available by county. The maps prepared by NRCS classify land into one of eight categories, which are defined as follows (DOC 2008:4):

- **Prime Farmland—**Land that has the best combination of features for the production of agricultural crops.
- **Farmland of Statewide Importance—**Land other than Prime Farmland that has a good combination of physical and chemical features for the production of agricultural crops.
- **Unique Farmland—**Land of lesser quality soils used for the production of the state's leading agricultural cash crops.
- **Farmland of Local Importance—**Land that is of importance to the local agricultural economy.
- **Grazing Land—**Land with existing vegetation that is suitable for grazing.
- **Urban and Built-Up Lands—**Land occupied by structures with a density of at least one dwelling unit per 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public utility structures, and other developed purposes.
- **Land Committed to Nonagricultural Use—**Vacant areas; existing lands that have a permanent commitment to development but have an existing land use of agricultural or grazing lands.
- **Other Lands—**Land that does not meet the criteria of the remaining categories.

The designations for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are defined together under the term "Agricultural Land" in CEQA (California Public Resources Code, Sections 21060.1 and 21095 and State CEQA Guidelines, Appendix G). The conversation of these types of farmland could be considered an environmental impact.

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to form contracts with private landowners to promote the continued use of the relevant land in agricultural or related open space use. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value. Local governments receive an annual subvention (subsidy) of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

The Williamson Act empowers local governments to establish "agricultural preserves" consisting of lands devoted to agricultural uses and other compatible uses. When such preserves are established, the locality may offer owners of agricultural land that is included in the preserves the opportunity to enter into annually renewable contracts that restrict the land to agricultural use for at least 10 years (i.e., the contract continues to run for 10 years following the first date upon which the contract is not renewed). In return, the landowner is guaranteed a relatively stable tax base, founded on the value of the land for agricultural/open space use only and unaffected by its development potential.

Cancellation of a Williamson Act contract involves an extensive review and approval process, in addition to payment by the landowner of fees of up to 12.5% of the property value. The local jurisdiction approving the cancellation must find that the cancellation is consistent with the purpose of the California Land Conservation Act or is in the public interest (Section 51282).

REGIONAL PLANS, POLICIES, REGULATIONS, AND LAWS

Paso Robles Municipal Airport Master Plan

The *Paso Robles Municipal Airport Master Plan* (City of Paso Robles 2004) was adopted by the County Board of Supervisors in November 2004. The master plan integrates long-term airfield and terminal area requirements with current and forecast aviation needs and airport access and parking needs. It represents a guide for airport development through the year-2020 planning period and indicates possible developments beyond the year 2020 for which land should be reserved (City of Paso Robles 2004:5-1).

A three-phase prioritized capital improvement program has been developed as a guide for future development to meet estimated short-range, intermediate-range, and long-range airport requirements (City of Paso Robles 2004:1-14). Among the future plans for the airport described in the master plan include the following:

- land acquisition within runway protection zones for each existing runway end;
- extension of existing runways;
- extension of existing and construction of additional taxiways;
- installation of a medium- and high-intensity lighting system along existing runways;
- extension of utility systems;
- construction of new access roadways and extension of existing roadways; and
- construction of new airport support facilities, such as a additional parking.

Paso Robles Municipal Airport Land Use Plan

The 2002 *California Airport Land Use Planning Handbook* (California Department of Transportation 2002) is the guiding document for establishing, preparing, and modifying local airport land use compatibility plans (ALUCPs) (formerly known as comprehensive airport land use plans [CLUPs]) and their policies and procedures. ALUCP policies are intended to increase the awareness of residents, in any future residential communities that are

approved, of their possible exposure to aircraft operations; to limit the potential for conflict between the airport and adjacent communities; and to protect future airport development and aircraft operations.

The *Paso Robles Municipal Airport Land Use Plan* was adopted by the San Luis Obispo County Airport Land Use Commission (SLOALUC) in November 1977 and amended in May 2007. This plan establishes planning boundaries for the airport and defines compatible types and patterns of future land use. The purpose of the *Paso Robles Municipal Airport Land Use Plan* is to:

- assist in the preservation, continued development, and expansion of the airport consistent with the *California Airport Land Use Planning Handbook* and the adopted *Paso Robles Municipal Airport Master Plan*;
- protect the public health, safety, and welfare by identifying land use measures to minimize the public's exposure to excessive noise and safety hazards within areas surrounding the airport;
- promote the safety and well being of the public by ensuring adoption of land use regulations; and
- provide policies and criteria to assist the SLOALUC and local reviewing agencies in evaluating the compatibility of proposed local actions and in determining the consistency of the proposed local action with the airport land use plan.

The *Paso Robles Municipal Airport Land Use Plan* describes six safety compatibility zones that are intended to minimize the risks to the safety and property of persons on the ground associated with potential aircraft accidents (City of Paso Robles 2007:4-9). The safety zones identify allowable land uses and are defined as Safety Zone 1 (Runway Protection Zones), Safety Zone 2 (Inner Approach/Departure Zone), Safety Zone 3 (Turning and Sideline Zones), Safety Zone 4 (Outer Approach/Departure Zone), Safety Zone 5 (Traffic Pattern Zone), and Safety Zone 6 (Outer Airport Influence Zone) (City of Paso Robles 2007:4-9 and 4-10). A small portion of the southeastern corner of the CDCR property is located in Safety Zone 3 while the remainder of the CDCR property is within Safety Zone 5 (Exhibit 4.8-2).

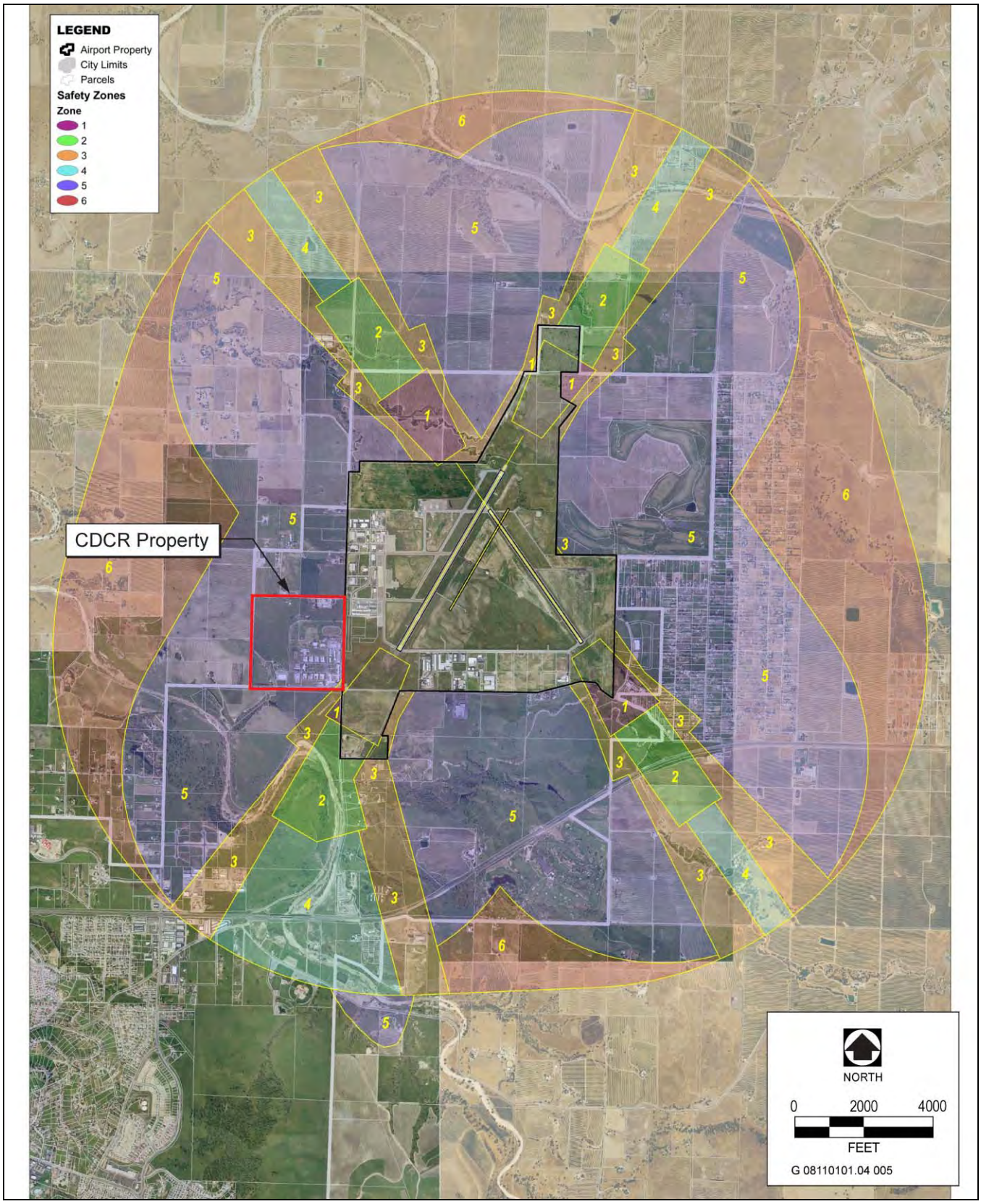
The *Paso Robles Municipal Airport Land Use Plan* prohibits new extremely noise-sensitive or moderately noise-sensitive land uses in those areas inside or above the 55-decibel (dB) community noise equivalent level (CNEL) contours, with the exception of development in areas bound by uses similar to those proposed, and as long as the proposed development does not extend the perimeter of the area already developed with noise-sensitive uses (City of Paso Robles 2007:4-8). The existing correctional facility is within the 55-dB CNEL noise contour (see Section 4.9, "Noise," of this DEIR).

New development that requires adoption of general plans and general plan amendments, adoption of specific plans and specific plan amendments, and amendments to zoning or land use control ordinances is subject to review and approval by the SLOALUC (City of Paso Robles 2007:2-3). The SLOALUC has no authority over existing land use, whether or not such uses are compatible with the *Paso Robles Municipal Airport Land Use Plan*. A land use is considered to be existing if a vesting tentative map has been approved and/or all discretionary approvals have been obtained; substantial construction investments by the landowner make it infeasible for the property to be used for anything other than its proposed use; or the land use physically exists (City of Paso Robles 2007:2-5).

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

San Luis Obispo County General Plan

Lands west of the CDCR property are located outside of the Paso Robles city limits in unincorporated San Luis Obispo County and are governed by the *San Luis Obispo County General Plan* (County General Plan). The County General Plan expresses the County's development goals and embodies public policy relative to the distribution of future land uses. It provides a basis for local government decision making and informs citizens,



Source: City of Paso Robles 2007, Adapted by AECOM 2010

Airport Land Use Planning Zones **Exhibit 4.8-2**

developers, and decision-makers of the rules that guide development within the county (San Luis Obispo County 2010). The County General Plan does not contain any land use or agricultural resources policies relevant to the proposed project.

As shown in Exhibit 4.8-3, the lands east of the CDCR property are within the unincorporated area of San Luis Obispo County and are governed by the County General Plan. These lands are designated as Agriculture. This land use designation is intended to promote and protect the agriculture industry in the county, to provide for continuing sound and healthy agriculture in the county, and to encourage a productive and profitable agriculture industry (San Luis Obispo County 2007:2-16). This land use designation includes all Williamson Act preserve contracts (San Luis Obispo County 2007:1-14).

Paso Robles General Plan and City of El Paso de Robles Zoning Code

The *City of El Paso de Robles General Plan* (City of Paso Robles 2003) (City General Plan) addresses several areas within the City's planning area, including areas within the Paso Robles city limits, the City's sphere of influence, and the planning impact area, that have distinct planning issues, constraints, and opportunities. The City General Plan defines the framework by which the City's physical and economic resources are to be managed and used through 2025 and provides guidance for land use decisions; development of new housing, infrastructure, and public and human services; protection of environmental resources; protection of people and property from natural and human-made hazards; allocation of fiscal resources; population growth; and expansion of City boundaries. The City General Plan does not contain any land use or agricultural resources policies relevant to the proposed project.

The City General Plan designates the CDCR property and lands to the southwest of the CDCR property as Public Facilities (Exhibit 4.8-3). This land use designation indicates areas owned and maintained by public or institutional agencies such as the City, County, state, and other local districts.

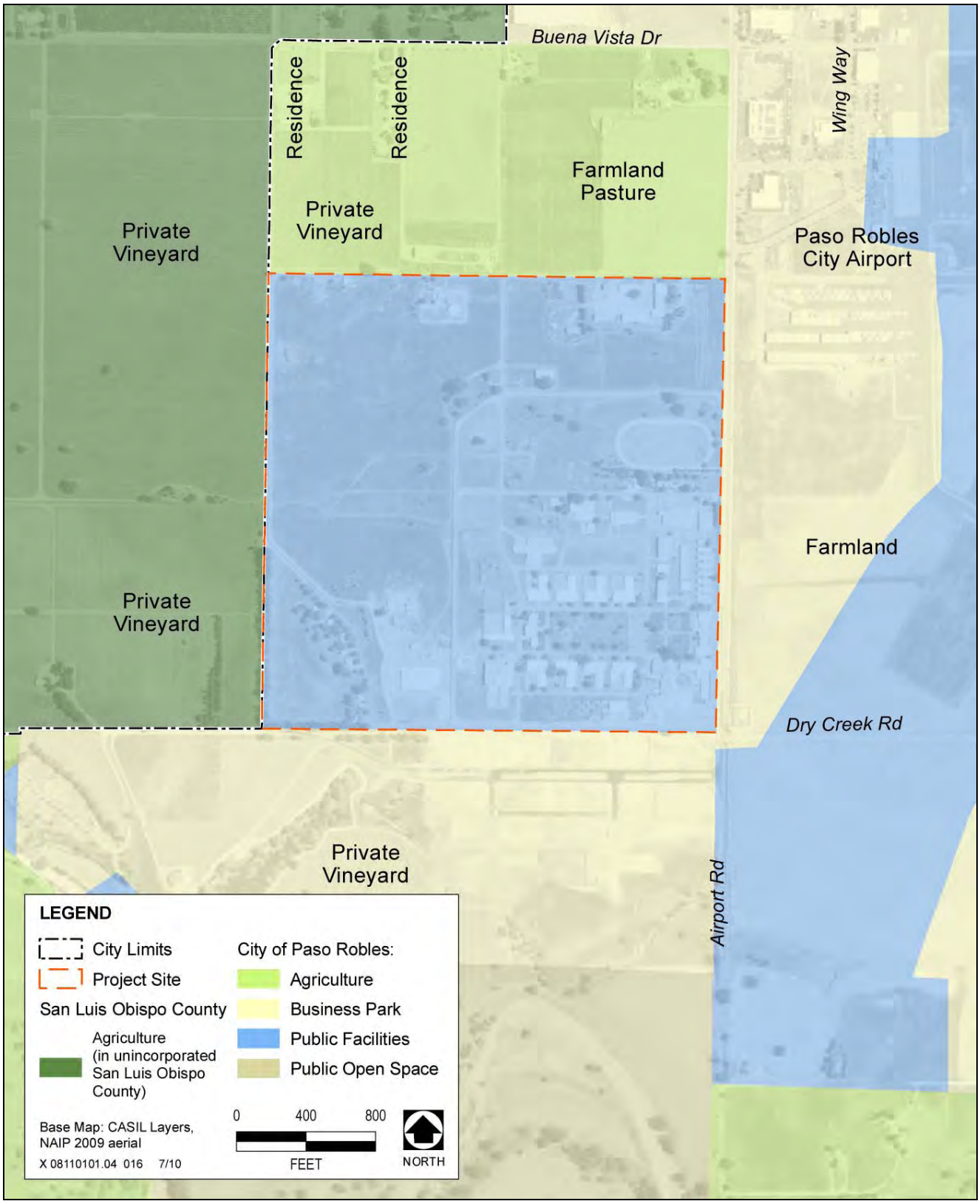
Adjacent lands to the north, south, and east of the CDCR property are located within Paso Robles city limits. The general plan designates lands directly to the north of the CDCR property as Agriculture. This land use designation is intended to allow and protect the operation of agricultural uses, provide open space, and provide a viable land use in areas affected by airport operations. This general plan designation includes the private vineyard and pastureland.

The lands directly to the east and south of the CDCR property are designated Business Park. This land use designation is intended to provide areas for businesses and industries in which all activities are conducted indoors. This general plan designation includes the Paso Robles Municipal Airport to the east and the business park that is currently under construction to the south.

The City of Paso Robles Zoning Code describes the general use, density, and type of development allowed in that area. All buildings, land use, or any type of physical development must comply with the site's zoning. The zoning designation for the CDCR property is PF (Public Facilities). Allowable land uses within this zoning designation include hospitals, community centers, government offices, schools, cemeteries, public service facilities, and parks. The zoning code does not include correctional facilities or prisons as a permitted or conditionally permitted use in the PF (Public Facilities) district. However, as stated previously, CDCR is exempt from all local plans, policies, and regulations.

Purple Belt Action Plan

The Purple Belt program was identified in the City's 2003 general plan in the Land Use and Open Space Elements. The Purple Belt Action Plan was adopted by the Paso Robles City Council on September 1, 2009, and represents the next step for the City toward its goal of establishing a greenbelt (Purple Belt) around the city. The purpose of the plan is to establish, with stakeholder input, a preferred set of methods and tools that could be used to create the Purple Belt (City of Paso Robles 2009b:4).



Source: City of Paso Robles 2003

General Plan Land Use Designations **Exhibit 4.8-3**

The Land Use and Open Space Elements do not establish boundaries of the Purple Belt or include specific policies related to the Purple Belt program; rather these elements establish policies to study and determine boundaries of the Purple Belt and a process through which the City would cooperate with the County and private landowners to preserve existing agricultural and open space lands. The boundaries of the Purple Belt are intended to support the region's agricultural economy, to prevent expansion and sprawl of inappropriate urban development, to preserve San Luis Obispo County's sense of rural character, to provide a buffer between conflicting land uses, and to allow clustering of residential uses within communities (City of Paso Robles 2009b:7).

The Purple Belt Action Plan concentrates on the city and communities that could be integral in the success of the program and could function as a partner to preserve agricultural and open space lands as community separators (City of Paso Robles 2009:13). The Action Plan area includes 12,263 acres within the Paso Robles city limits, 859 acres in the City's sphere of influence, and 105,000 acres in unincorporated San Luis Obispo County (City of Paso Robles 2009b:11).

The Purple Belt Action Plan defines three priority areas: High-priority areas, which identify areas that are in active agricultural use, include larger parcels, are visible from major highways or roads, are potentially more susceptible to development, and/or have high-quality aesthetic values; moderate-priority areas, which are similar to high-priority areas but to a lesser extent; and low-priority areas, which include land already parceled into smaller lots. Areas east of the CDCR property within unincorporated San Luis Obispo County are identified as a high-priority area. It should be noted that the boundaries of these priority areas are not firm but are illustrative of the general vicinity where implementation of the Purple Belt Action Plan may be more effective in conserving agricultural land. The CDCR property is not located within any of these priority areas but is immediately adjacent to the high-priority area north and east of the CDCR property that is within the unincorporated area of San Luis Obispo County (City of Paso Robles 2009b:11).

4.8.3 Environmental Impacts of the Project

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a land use and agricultural resources impact is considered significant if implementation of the proposed project would do any of the following:

- physically divide an established community;
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect;
- conflict with any applicable habitat conservation plan or natural community conservation plan;
- convert Important Farmland (i.e., Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;
- conflict with existing zoning for agricultural use or a Williamson Act contract; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland to nonagricultural use.

Other CEQA land use considerations include evaluation of project consistency with plans and policies adopted for the purpose of avoiding or reducing impacts, and consistency with habitat conservation plans. The City's general plan does not contain any land use or agricultural resources policies relevant to the proposed project. Specific

policies, plans, or regulations adopted for the purpose of avoiding or mitigating an environmental effect are considered within the resource issue discussions (e.g., noise, air quality) where the plans and policies are relevant. The project's consistency with an adopted habitat conservation plan is discussed in Section 4.2, "Biological Resources." The project's compatibility with land uses outlined in the *Paso Robles Municipal Airport Land Use Plan* are discussed in Section 4.6, "Hazards and Hazardous Materials." Therefore, these issues are not discussed further in this section.

Project Impacts

Impact 4.8-1: Potential for Division of an Established Community

Conversion and activation of the Estrella adult male correctional facility, reactivation and expansion of CAL FIRE conservation camp facilities, and construction of the reentry facility would not physically divide an established community. The nearest rural residences and associated agricultural outbuildings are located south of Buena Vista Drive. These residences would be physically separated from the CDCR property by the existing private vineyards and agricultural row crops immediately adjacent to the northern boundary of the property. The Paso Robles Property Master Reuse Plan (Master Reuse Plan) components would be located entirely on existing State-owned property, and would not affect the site's surrounding land uses because the Master Reuse Plan would continue existing land uses (i.e., prison facilities).

Implementing the Master Reuse Plan would not result in any physical barriers that would divide an established community, and proposed construction would be located entirely on State-owned property. Therefore, this impact would be ***less than significant*** *(Impact 4.8-1).*

Impact 4.8-2: Conflict with the City of Paso Robles Purple Belt Action Plan

The CDCR property is not designated as a high-, moderate-, or low-priority area in the Purple Belt Action Plan. The proposed Master Reuse Plan facilities are immediately adjacent to the high-priority area north and east of the site that is within the unincorporated area of San Luis Obispo County. The boundaries of these priority areas are not firm boundaries but are illustrative of the general vicinity where implementation of the Purple Belt Action Plan may be more effective in conserving agricultural land. Nonetheless, the project would not affect any of these priority areas. In addition, the project components would be located entirely on State-owned property and the project would continue existing land uses (i.e., prison facilities).

Implementing the Master Reuse Plan would not conflict with the Purple Belt Action Plan because proposed construction would be located on existing prison grounds and would continue existing land uses. The Master Reuse Plan would not affect any designated priority areas or implementation of the Purple Belt Action Plan. Therefore, this impact would be ***less than significant*** *(Impact 4.8-2).*

Impact 4.8-3: Conversion of Important Farmland to Nonagricultural Uses

Conversion and activation of the Estrella Adult Correctional Facility and reactivation and construction of new CAL FIRE conservation camp facilities would not convert Important Farmland to nonagricultural uses. Project components would be located in areas designated by the San Luis Obispo County Important Farmland Map as Urban and Built-Up Land and farmland of local potential importance (Exhibit 4.8-1). This farmland designation is not considered Important Farmland under CEQA (California Public Resources Code, Sections 21060.1 and 21095; State CEQA Guidelines, Appendix G). No farming activities occur on these properties.

Construction of these components would not involve other changes in the existing environment that could result in conversion of Important Farmland to nonagricultural uses. Important Farmland is located north, south, and west of the CDCR property. However, the project components would be located entirely on State-owned property and the project would not affect the site's surrounding land uses because the project would continue existing land uses (i.e., prison facilities).

Implementing the Master Reuse Plan would not convert Important Farmland to nonagricultural uses or cause changes that would result in the conversion of Important Farmland. The CDCR property is not designated as Important Farmland and proposed construction would be located on existing prison grounds and would continue existing land uses. Therefore, this impact would be ***less than significant*** *(Impact 4.8-3).*

Impact 4.8-4: Conflict with or Potential Cancellation of Existing Williamson Act Contracts

Implementation of the Master Reuse Plan would not conflict with existing Williamson Act contracts or result in the cancellation of such contracts. The CDCR property is not under a Williamson Act contract (Exhibit 4.8-1).

Implementing the Master Reuse Plan would not conflict with existing Williamson Act contracts or result in the cancellation of such contracts. The CDCR property is not under Williamson Act contract and proposed construction would be located on existing prison grounds and would continue existing land uses. Therefore, this impact would be ***less than significant*** *(Impact 4.8-4).*

4.8.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

All of the Master Reuse Plan's land use impacts were identified as less than significant, and therefore no mitigation is required.

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4.9 NOISE

This section describes ambient noise conditions near the CDCR property and summarizes applicable noise regulations. This section also analyzes noise impacts associated with the implementation of the Paso Robles Property Master Reuse Plan (Master Reuse Plan), including a discussion of short-term construction and long-term operational noise sources, and compatibility of surrounding land uses with onsite noise levels.

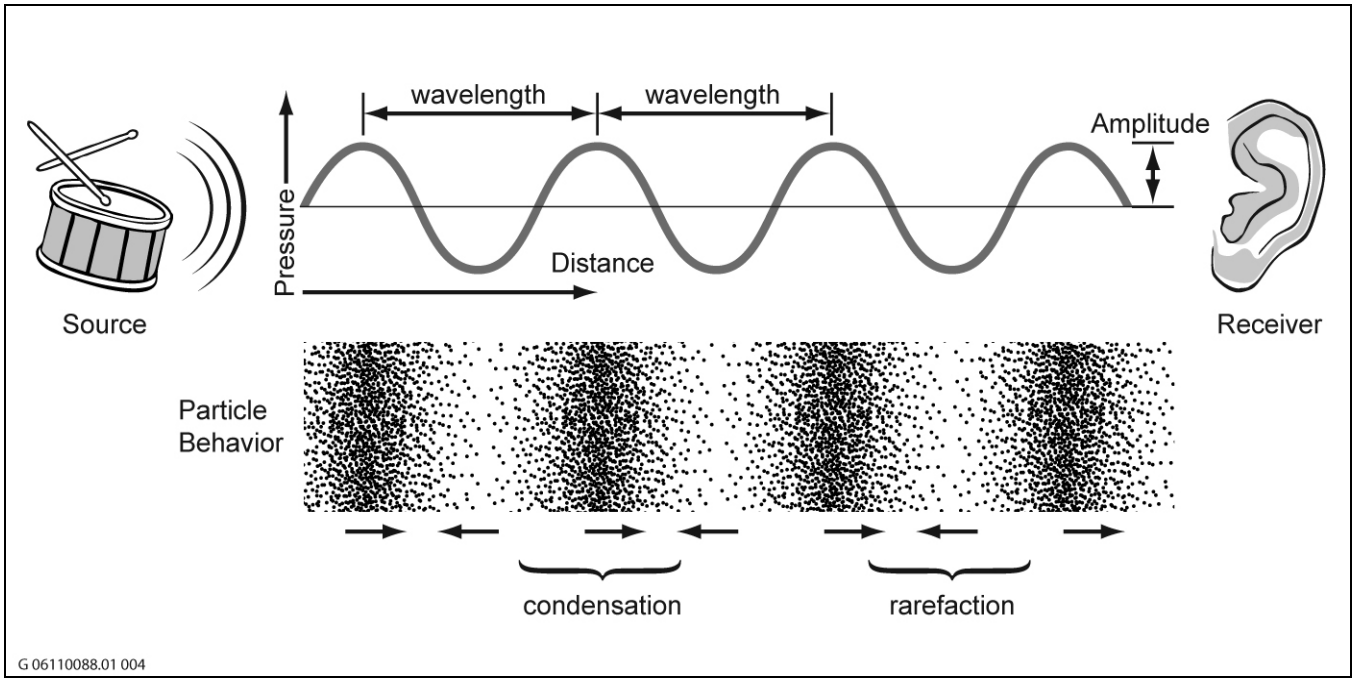
4.9.1 EXISTING CONDITIONS

SOUND FUNDAMENTALS

Noise is generally defined as sound that is loud, disagreeable, unexpected, or unwanted. Sound, as described in more detail below, is mechanical energy transmitted in the form of a wave by a disturbance or vibration that causes pressure variation in air that the human ear can detect.

Sound Properties

A sound wave is introduced into a medium (air) by a vibrating object. The vibrating object (*e.g.*, vocal cords, the string of a guitar or the diaphragm of a radio speaker) is the source of the disturbance that moves through the medium (Exhibit 4.9-1). Regardless of the type of source creating the sound wave, the particles of the medium through which the sound moves are vibrating in a back-and-forth motion at a given rate (frequency). The frequency of a wave refers to how often the particles vibrate when a wave passes through the medium. The frequency of a wave is measured as the number of complete back-and-forth vibrations of a particle per unit of time. One complete back-and-forth vibration is called a cycle. If a particle of air undergoes 1,000 cycles in 2 seconds, then the frequency of the wave would be 500 cycles per second. The common unit used for frequency is in cycles per second, called Hertz (Hz).



Source: Data provided by AECOM in 2010

Sound Wave Properties **Exhibit 4.9-1**

Each particle vibrates as a result of the motion of its nearest neighbor. For example, the first particle of the medium begins vibrating at 500 Hz and sets the second particle of the medium into motion at the same frequency (500 Hz). The second particle begins vibrating at 500 Hz and thus sets the third particle into motion at 500 Hz. The process continues throughout the medium; hence each particle vibrates at the same frequency, which is the frequency of the original source. Subsequently, a guitar string vibrating at 500 Hz will set the air particles in the room vibrating at the same frequency (500 Hz), which carries a sound signal to the ear of a listener that is detected as a 500-Hz sound wave.

The back-and-forth vibration motion of the particles of the medium would not be the only observable phenomenon occurring at a given frequency. Because a sound wave is a pressure wave, a detector could be used to detect oscillations in pressure from high to low and back to high pressure. As the compression (high-pressure) and rarefaction (low-pressure) disturbances move through the medium, they would reach the detector at a given frequency. For example, a compression would reach the detector 500 times per second if the frequency of the wave were 500 Hz. Similarly, a rarefaction would reach the detector 500 times per second if the frequency of the wave were 500 Hz. Thus, the frequency of a sound wave refers not only to the number of back-and-forth vibrations of the particles per unit of time, but also to the number of compression or rarefaction disturbances that pass a given point per unit of time. A detector could be used to detect the frequency of these pressure oscillations over a given period of time. The period of the sound wave can be found by measuring the time between successive high-pressure points (corresponding to the compressions) or the time between successive low-pressure points (corresponding to the rarefactions). The frequency is simply the reciprocal of the period; thus an inverse relationship exists so that as frequency increases, the period decreases, and vice versa.

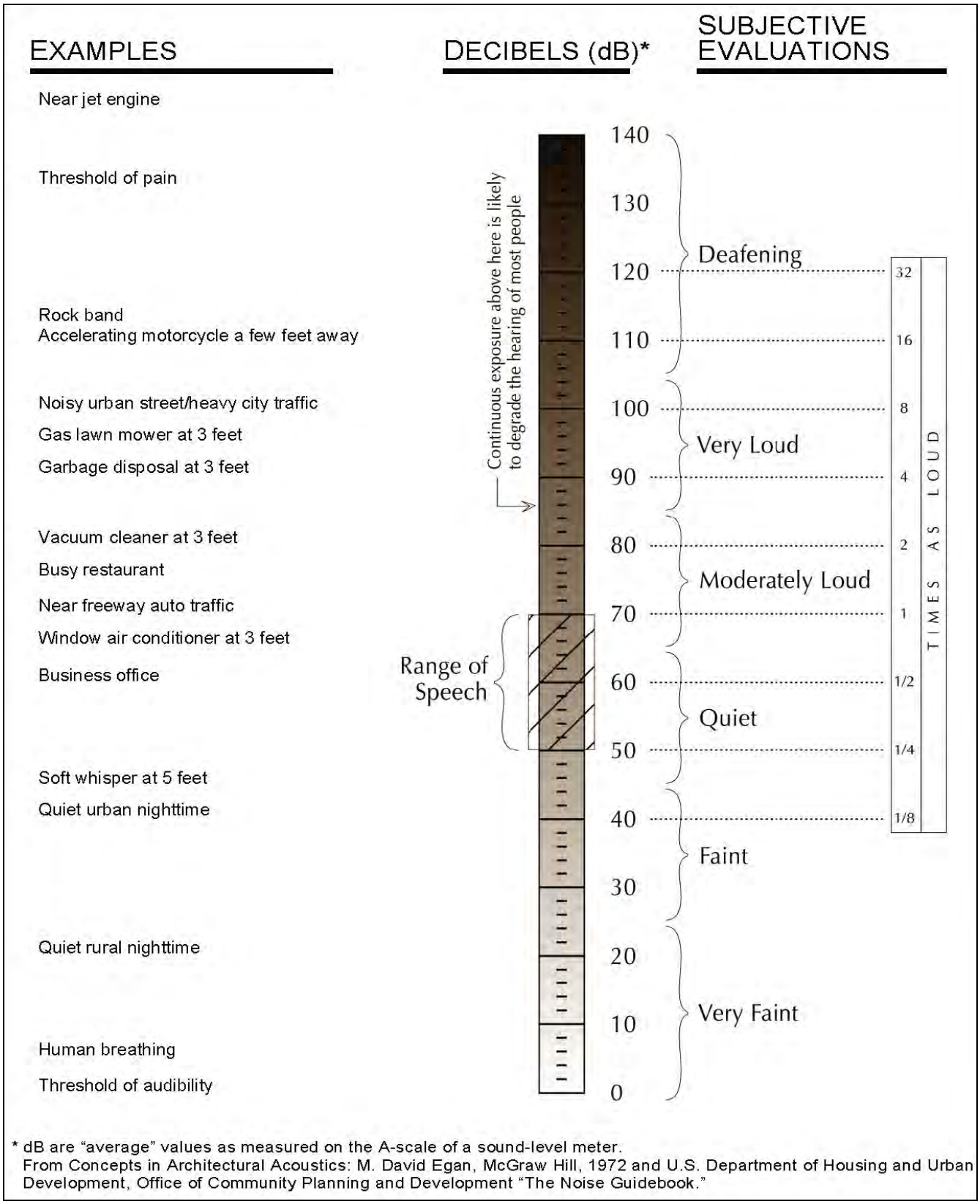
A wave is a phenomenon that transports energy along a medium. The amount of energy carried by a wave is related to the amplitude (loudness) of the wave. A high-energy wave is characterized by large amplitude; a low-energy wave is characterized by small amplitude. The amplitude of a wave refers to the maximum amount of displacement of a particle from its rest position. The energy transported by a wave is directly proportional to the square of the amplitude of the wave. This means that a doubling of the amplitude of a wave indicates a quadrupling of the energy transported by the wave.

Sound and the Human Ear

Because of the ability of the human ear to detect a wide range of sound-pressure fluctuations, sound-pressure levels are expressed in logarithmic units called decibels (dB) to avoid a very large and awkward range in numbers. The sound-pressure level in decibels is calculated by taking the log of the ratio between the actual sound pressure and the reference sound pressure and then multiplying by 20. The reference sound pressure is considered the absolute hearing threshold (Caltrans 2009:2-8). Use of this logarithmic scale reveals that the total sound from two individual 65-dB sources is 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB).

Because the human ear is not equally sensitive to all audible frequencies, a frequency-dependent rating scale was devised to relate noise to human sensitivity. An A-weighted dB (dBA) scale performs this compensation by discriminating against frequencies that are more sensitive to humans. The basis for compensation is the faintest sound audible to the average ear at the frequency of maximum sensitivity. This dBA scale has been chosen by most authorities for regulating environmental noise. Exhibit 4.9-2 presents typical indoor and outdoor noise levels.

With respect to how humans perceive and react to changes in noise levels, a 1-dBA increase is imperceptible, a 3-dBA increase is barely perceptible, a 6-dBA increase is clearly noticeable, and a 10-dBA increase is subjectively perceived as approximately twice as loud (Egan 1988:21), as presented in Table 4.9-1. Table 4.9-1 was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. It is probably most applicable to noise levels in the range of 50–70 dBA because this is the usual range of voice and interior noise levels. For these reasons, a noise level increase of 3 dBA or more is typically considered a substantial degradation of the existing noise environment.



Source: Data provided by AECOM in 2010

Typical Noise Levels **Exhibit 4.9-2**

Table 4.9-1 Subjective Reaction to Changes in Noise Levels of Similar Sources		
Change in Level (dBA)	Subjective Reaction	Factor Change in Acoustical Energy
1	Imperceptible (Except for Tones)	1.3
3	Just Barely Perceptible	2.0
6	Clearly Noticeable	4.0
10	About Twice (or Half) as Loud	10.0

Note: dBA = A-weighted decibels
Source: Egan 1988:21

Sound Propagation and Attenuation

As sound (noise) propagates from the source to the receptor, the attenuation, or manner of noise reduction in relation to distance, depends on surface characteristics, atmospheric conditions, and the presence of physical barriers. The inverse-square law describes the attenuation caused by the pattern in which sound travels from the source to receptor. Sound travels uniformly outward from a point source in a spherical pattern with an attenuation rate of 6 dBA per doubling of distance (dBA/DD). However, from a line source (e.g., a road), sound travels uniformly outward in a cylindrical pattern with an attenuation rate of 3 dBA/DD. The surface characteristics between the source and the receptor may result in additional sound absorption and/or reflection. Soft surfaces such as dirt cover or vegetation can provide an additional 1.5 dBA/DD. Hard surfaces such as parking lots, water, and other roadway surfaces would result in reflection. Atmospheric conditions such as wind speed, temperature, and humidity also affect noise attenuation. Furthermore, the presence of a barrier between the source and the receptor would attenuate noise levels. The actual amount of attenuation depends on the size of the barrier and the frequency of the noise. A noise barrier may consist of any natural or human-made feature such as a hill, grove of trees, building, wall, or berm (Caltrans 2009:2-39).

All buildings provide some exterior-to-interior noise reduction. A building constructed with a wood frame and a stucco or wood sheathing exterior typically provides a minimum exterior-to-interior noise reduction of 25 dBA with its windows closed; by contrast, a building constructed of a steel or concrete frame, a curtain wall or masonry exterior wall, and fixed plate-glass windows one-quarter inch thick typically provides an exterior-to-interior noise reduction of 30–40 dBA with its windows closed (Paul S. Veneklasen & Associates 1973, cited in Caltrans 2002:7-37).

NOISE DESCRIPTORS

The selection of a proper noise descriptor for a specific source depends on the spatial and temporal distribution, duration, and amplitudinal fluctuation of the noise. The noise descriptors most often used when dealing with traffic, community, and environmental noise are defined below (FTA 2006:2-21):

- **L_{max} (maximum noise level):** The maximum instantaneous noise level during a specific period of time. The L_{max} may also be referred to as the "peak (noise) level."
- **L_{min} (minimum noise level):** The minimum instantaneous noise level during a specific period of time.
- **L_X (statistical descriptor):** The noise level exceeded X% of a specific period of time.
- **L_{eq} (equivalent noise level):** The energy mean (average) noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the L_{eq}.

In noise environments determined by major noise events, such as aircraft overflights, the L_{eq} value is heavily influenced by the magnitude and number of single events that produce the high noise levels.

- **L_{dn} (day-night noise level):** The 24-hour L_{eq} with a 10-dBA "penalty" for noise events that occur during the noise-sensitive hours between 10 p.m. and 7 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours, and this generates a higher reported noise level when determining compliance with noise standards. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

- **CNEL (community noise equivalent level):** A noise level similar to the L_{dn} described above, but with an additional 5-dBA "penalty" added to noise events that occur during the noise-sensitive hours between 7 p.m. and 10 p.m., which are typically reserved for relaxation, conversation, reading, and television. If the same 24-hour noise data are used, the reported CNEL is typically approximately 0.5 dBA higher than the L_{dn}.

- **SENL (single-event [impulsive] noise level):** A receiver's cumulative noise exposure level from a single impulsive noise event, which is an acoustical event of short duration that involves a change in sound pressure above some reference value. SENLs typically represent the noise events used to calculate the L_{eq}, L_{dn}, and CNEL.

Community noise is commonly described in terms of the ambient noise level, the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average (equivalent) sound level, L_{eq}, which corresponds to a steady-state sound level that contains the same total energy as a time-varying signal over a given time period (usually 1 hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, as defined above, and shows a positive correlation with community response to noise.

Negative Effects of Noise on Humans

Negative effects of noise exposure include physical damage to the human auditory system, interference, and disease. Physical damage to the auditory system can lead to gradual or traumatic hearing loss. Gradual hearing loss is caused by sustained exposure to moderately high noise levels over an extended period of time; traumatic hearing loss is caused by sudden exposure to extremely high noise levels over a brief period. Both gradual and traumatic hearing loss may result in permanent hearing damage. In addition, noise may interfere with or interrupt sleep, relaxation, recreation, and communication. Although most interference may be classified as annoying, the inability to hear a warning signal is considered dangerous. Noise may also contribute to diseases associated with stress, such as hypertension, anxiety, and heart disease. The degree to which noise contributes to such diseases depends on the frequency, bandwidth, noise level, and duration of exposure (Caltrans 2009:2-63 to 2-66).

Vibration

Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structureborne noise. Structureborne noise is caused by the sound waves created by the vibration of structures. Natural (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and human-caused (e.g., explosions, machinery, traffic, trains, construction equipment) sources of oscillation of ground surfaces is called groundborne vibration. Some vibration sources, such as factory machinery, are continuous; others, such as explosions, are transient. As is the case with airborne sound, groundborne vibration may be described by amplitude and frequency.

Vibration amplitude is typically expressed in peak particle velocity (PPV) or root mean square (RMS), as in RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is the metric often used to describe blasting vibration and other vibration sources that result in structural stresses in buildings (FTA 2006:Chapter 7; Caltrans 2002:11). The RMS of a signal is the average of the squared amplitude of the signal,

typically calculated over a period of 1 second. Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In fact, it is more accurate to think of the human response to vibration based on the average amplitude of that vibration. As with airborne sound, the RMS velocity is often expressed in decibel notation as velocity decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2006:Chapter 7). This velocity decibel scale is based on a reference value of 1 microinch per second (μin/sec).

The background vibration-velocity level typical of residential areas is approximately 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2006:Chapter 7).

Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration is rarely perceptible. The range of human perception of vibration is from approximately 50 VdB, the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings. Construction activities can generate groundborne vibrations, which can pose a risk to nearby structures. Constant or transient vibration can weaken structures, crack facades, and disturb occupants (FTA 2006:Chapter 7).

Construction-generated vibration can be transient, random, or continuous. Transient construction vibration is generated by blasting, impact pile driving, and wrecking balls. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment. Continuous vibration results from vibratory pile drivers, large pumps, horizontal directional drilling, and compressors. Table 4.9-2 summarizes the general human response to different levels of groundborne vibration.

Table 4.9-2
Human Response to Different Levels of Groundborne Vibration

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there is an infrequent number of events per day.

Note: VdB = velocity decibels referenced to 1 microinch/sec and based on the root mean square vibration velocity.
Source: FTA 2006:7-8

Existing Sensitive Land Uses

Land uses that are sensitive to noise and vibration are those uses where exposure would result in adverse effects (i.e., annoyance and/or structural damage) and uses where quiet is an essential element of their intended purpose. Residences are of primary concern because of the potential for increased, prolonged exposure of individuals to both interior and exterior, noise and vibration. Other noise-sensitive land uses are hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low interior noise levels are essential.

Noise-sensitive land uses of primary concern located near the CDCR property are residential homes surrounding the site. The closest of these residences to the proposed reentry facility is approximately 750 feet north, off of Buena Vista Drive. The closest residence to the site of the proposed Estrella Adult Correctional Facility is approximately 1,750 feet east, on Dry Creek Road. The closest residence to the CAL FIRE facility is approximately 1,150 feet north, on Buena Vista Drive. The nearest offsite noise-sensitive receptor near the CDCR

property is the single-family residential land use located approximately 750 feet north of the acoustical center of the reentry facility site (this is the same residence closest to the CAL FIRE facility).

Existing Noise Sources

The CDCR property is located in a rural area just outside of Paso Robles. The dominant noise sources surrounding the property are vehicular traffic and aircraft originating from the Paso Robles Municipal Airport located across Airport Road. The south end of the runway is approximately 1,500 feet east of the eastern boundary of the CDCR property. Other mobile sources, which include personal vehicles, public transportation, and commercial vehicles, are the secondary noise sources in the project area. Noise associated with mobile sources includes engines accelerating, braking, doors closing, horns honking, and tire-pavement interaction. Stationary noise sources in the area would include but are not limited to agricultural equipment, dogs barking, airport operation–related noise, and other miscellaneous neighborhood noise (e.g., music playing, garbage collection).

Existing Noise Survey

To quantify the existing noise environment in the project area, two short-term noise measurements and two 24-hour measurements were collected on Tuesday and Wednesday, November 24 and 25, 2009, using two Larson-Davis Model 820 sound meters and one Larson-Davis Model 824 sound meter. The sound meters were calibrated immediately before and after the measurement sequence and the measurements were conducted in accordance with the acoustical standards of the American National Standards Institute. As presented in Table 4.9-3, noise levels in the project area range from 45 dBA L_{eq} to 54 dBA L_{eq}, with L_{max} ranges from 62 dBA to 82 dBA. L_{dn} levels measured by the 24-hour measurements ranged from 58 dBA to 60 dBA. Noise sources noted during the measurements included aircraft overflights, agricultural equipment, motor vehicles, and building heating, ventilation, and air conditioning (HVAC) systems. Exhibit 4.9-3 shows the measurement locations.

Table 4.9-3
Existing Ambient Noise Levels

Short-Term Measurement[1]	Location	Monitoring Period	Sound Level (dBA)		
			L_{eq}	L_{max}	L_{min}
1	Northwest Corner of CDCR Property	November 24, 9:36–9:51 a.m.	50	66	39
2	Southwest Corner of CDCR Property	November 24, 10:01–10:16 a.m.	45	62	38
24-Hour Measurement[1]	Location	Monitoring Period	L_{eq}	L_{max}	L_{dn}
A	Northeast Corner of CDCR Property	November 24, 10:00 a.m.– November 25, 10:00 a.m.	54	82	60
B	Southeast Corner of CDCR Property	November 24, 11:00 a.m.– November 25, 11:00 a.m.	53	82	58

Notes: CDCR = California Department of Corrections and Rehabilitation; dBA = A-weighted decibels, L_{dn} = day-night noise level, L_{eq} = equivalent noise level, L_{max} = maximum, L_{min}= minimum noise level,

[1] Measurement locations are shown in Exhibit 4.9-3.

Source: Measurements collected by AECOM on November 24 and 25, 2009

Source: City of Paso Robles 2003, compiled by AECOM in 2010

Noise Monitoring Locations **Exhibit 4.9-3**

Existing Traffic Noise Levels

Existing traffic noise levels for the roadways around the CDCR property were estimated using the Federal Highway Administration's (FHWA's) traffic noise prediction model (FHWA-RD-77-108) and traffic data obtained from the traffic analysis prepared for this project (see Section 4.11, "Transportation") and the *City of Paso Robles General Plan* Noise Element (City of Paso Robles 2003). Table 4.9-4 presents the predicted L_{dn} noise levels at 100 feet from the centerline of the near travel lane and distances from roadway centerline to the 60-, 65-, and 70-dBA L_{dn} contours for existing average daily traffic (ADT) volumes. Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths. Actual noise levels vary from day to day, depending on local traffic volumes, shielding from existing structures, variations in attenuation rates attributable to changes in surface parameters, and meteorological conditions.

Table 4.9-4
Summary of Modeled Existing Vehicular Traffic Noise Levels (2003)

Roadway	From	To	ADT	Distance (feet) from Roadway Centerline to L_{dn}			L_{dn} (dBA) 100 Feet from Roadway Centerline
				70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}	
SR 46	U.S. 101 southbound ramp	the West	16,630	74	159	342	68.0
SR 46	U.S. 101 northbound ramp	Buena Vista Drive	20,700	86	185	398	69.0
SR 46	Buena Vista Drive	Golden Hill Road	19,280	104	223	481	70.2
SR 46	Golden Hill Road	Union Road	15,920	91	197	424	69.4
SR 46	Union Road	Airport Road	20,260	118	253	545	71.1
SR 46	Airport Road	Dry Creek Road	15,360	98	211	454	69.8
SR 46	Dry Creek Road	The East	10,800	89	193	415	69.3
Dry Creek Road	SR 46	Airport Road	3,690	9	19	41	54.3
Golden Hill Road	Union Road	the South	79,60	15	32	69	57.6
Buena Vista Drive	SR 46	the North	5,530	12	25	54	56.0
Golden Hill Road	SR 46	the North	4,340	10	21	46	55.0
Golden Hill Road	SR 46	Union Road	6,260	13	27	59	56.6
Union Road	SR 46	Golden Hill Road	5,100	11	24	51	55.7
Union Road	Golden Hill Road	the West	3,760	9	19	42	54.3
Airport Road	SR 46	Dry Creek Road	5,380	11	25	53	55.9
Airport Road	Dry Creek Road	The North	3,620	9	19	41	54.2

Notes: ADT = average daily traffic; dBA = A-weighted decibels; L_{dn} = day-night noise level; SR = State Route; U.S. 101 = U.S. Highway 101.. Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features; or noise contribution from other sources. See modeling results in Appendix E for further detail.
Source: Modeling performed by AECOM in 2010

Existing Airport Noise Levels

Aircraft originating from the Paso Robles Municipal Airport located across Airport Road is a dominant noise source on the CDCR property. Noise levels from individual aircraft were measured from the parking lot in the

southeast corner of the CDCR property (24-hour measurement site B). Noise levels of individual single-prop aircraft ranged from 61 to 70 dBA L_{eq} at ground level. Noise contours for the Paso Robles Municipal Airport are published in the *Paso Robles Municipal Airport Land Use Plan* (City of Paso Robles 2007:Figure 2) and are presented below in Exhibit 4.9-4.

4.9.2 REGULATORY BACKGROUND

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Environmental Protection Agency

The U.S. Environmental Protection Agency's (EPA's) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, which established programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government, thereby allowing more individualized control for specific issues by designated federal, state, and local government agencies. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to designated federal agencies and state and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place.

Federal Aviation Administration

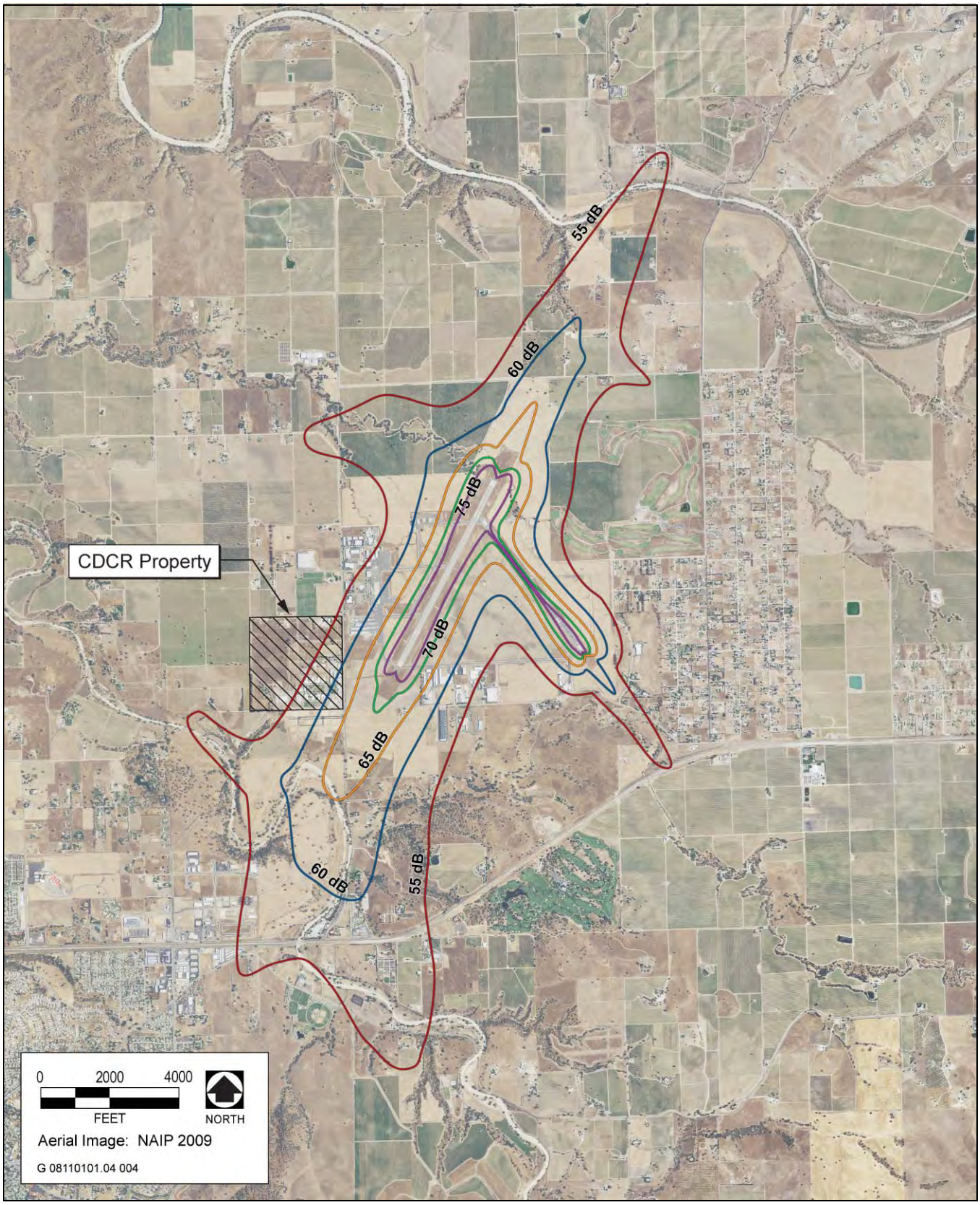
Overview

The Federal Aviation Administration (FAA) is an agency of the U.S. Department of Transportation with authority to regulate and oversee all aspects of civil aviation in the United States. The FAA exercises its authority through Federal Aviation Regulations (FARs). The FARs, part of Title 14 of the Code of Federal Regulations (CFR), regulate a wide variety of activities such as airplane design, typical airline flights, pilot training activities, hot-air ballooning, lighter-than-air craft, heights of human-made structures, obstruction lighting and marking, and model rocket launches and model aircraft operation. The rules are designed to promote safe aviation, protecting pilots, passengers, and the general public from unnecessary risk and intended to protect the national security of the United States. The FARs are organized into sections, called parts to reflect their organization within the CFR. Each part deals with a specific type of activity. Part 150 deals with airport noise compatibility planning and is described further below.

Federal Aviation Regulations, Part 150

Part 150 of the FAR prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs. Part 150 prescribes single systems for measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and surveyed reaction of people to noise and for determining exposure of individuals to noise that result from the operations of an airport. Land uses that are normally compatible with various levels of exposure to noise by individuals are also identified. Lastly, Part 150 provides technical assistance to airport operators, in conjunction with other federal, state, and local authorities, to prepare and execute appropriate noise compatibility planning and implementation programs.

The primary intent of Part 150 is to map the location of noise impact areas and to study various options for reducing noise at its source (abatement) or reducing the impact of noise on the receiving end (mitigation). A primary incentive for an airport to do a Part 150 study is the resulting eligibility for federal grant funds to assist in implementing mitigation measures adopted by the study and approved by the FAA.



Source: City of Paso Robles Airport Land Use Commission 2005, compiled by AECOM in 2010

Paso Robles Municipal Airport 2006 Noise Contours **Exhibit 4.9-4**

Federal Transit Administration

The Federal Transit Administration (FTA) has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses to address the human response to groundborne vibration (FTA 2006:7-8):

- 65 VdB (referenced to 1 μin/sec and based on the RMS velocity amplitude) for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities);
- 83 VdB for residential uses and buildings where people normally sleep; and
- 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices).

Standards have also been established to address the potential for groundborne vibration to cause structural damage to buildings. These standards were developed by the Committee of Hearing, Bio Acoustics, and Bio Mechanics at the request of EPA (FTA 2006: B-1). For fragile structures, the committee recommends a maximum limit of 0.25 in/sec PPV (FTA 2006:12-12).

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulatory guidelines governing noise levels generated by individual motor vehicles and those governing occupational noise control (i.e., the California Department of Transportation [Caltrans], the California Vehicle Code, and the California Occupational Safety and Health Administration) are not applicable to planning efforts, nor are these areas typically subject to CEQA analysis. Thus, these regulatory guidelines are not included in this analysis. The following is State of California and agency guidance that has been deemed applicable to the Master Reuse Plan.

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the state. The code provides acoustical regulations for both exterior-to-interior sound insulation as well as sound and impact isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dB L_{dn}, with windows closed, in any habitable room for general residential uses. Section 13-102 of Title 24 presents minimum requirements for detention facilities and requires that all inmate housing areas be constructed so that average noise levels not exceed 70 dB during periods of activity and 45 dB during sleeping hours.

With respect to vibration, Caltrans recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2002:11) to protect fragile, historic, and residential structures. These standards are more stringent than the federal guidance established by the Committee of Hearing, Bio Acoustics, and Bio Mechanics, presented in the discussion of federal plans, policies, regulations, and laws above.

Additionally, Caltrans' *Airport Land Use Planning Handbook* was used as a technical resource when preparing this DEIR.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of El Paso de Robles General Plan Noise Element

The following goals, policies, standards, and definitions from the Noise Element of the *City of El Paso de Robles General Plan* would be are relevant to the project.

- **Policy N-1A:** Noise Minimization. New development shall be designed to comply with the maximum allowable noise exposures of 65 dB CNEL for outdoor activities (except for parks); and 45 dB CNEL for indoor activities.

- **Policy N-1B:** Airport Noise. Minimize exposure to airport noise through implementation of the Airport Land Use Plan noise policies and programs.

Standards

By adopting this Noise Element, the City of Paso Robles (City) sets its own transportation source noise standards for outdoor activity areas and interior spaces. The maximum allowable noise exposure for outdoor activity is 65 dBA L_{dn} and 45 dBA L_{dn} in interior spaces for residential, hotel and motel, hospital and nursing home, theater, auditorium, meeting hall, office building, school, and library uses.

Definitions

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, libraries, and parks are most sensitive to noise intrusion, and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. Noise-sensitive residential areas are located throughout the community.

Stationary noise sources of concern typically include generators, pumps, air compressors, outdoor speakers, motors, heavy equipment, and similar machinery. These are often associated with trucking companies, tire shops, auto mechanic shops, metal shops, shopping centers, drive-up windows, car washes, loading docks, athletic fields, and electric generating stations. Where new development is proposed in a location that may be affected by existing stationary noise sources, noise at the proposed location shall not exceed the noise level standards of Table 4.9-5 or where noise mitigation measures have been incorporated into the design of the development to reduce noise exposure to or below the levels (specified in Table 4.9-5). These standards do not apply to noise sources from agricultural operations.

Table 4.9-5
City of Paso Robles Noise Exposure Standards—Stationary Noise Sources[1]

	Daytime (7 a.m. to 10 a.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly, dB[2]	50	45
Maximum level, dB[2]	70	65
Maximum level, dB—impulsive noise[3]	65	60

Notes: dB = decibels
[1] As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.
[2] Sound level measurements shall be made with slow meter response.
[3] Sound level measurements shall be made with fast meter response.
Source: City of Paso Robles 2003:Table N-5

City of Paso Robles Noise Ordinance

The following ordinances from Chapter 9.07 of the City of Paso Robles Code of Ordinances would be applicable to the project (City of Paso Robles 1982):

> 9.07.020 Prohibited conduct.
>
> It shall be unlawful for any person to make, continue, or cause to be made or continued any loud, unnecessary or unusual noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of any reasonable person of normal sensitiveness residing in the neighborhood. The standards which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:
>
> (a) The audible volume of the noise;
> (b) The intensity of the noise;
> (c) Whether the nature of the noise is usual or unusual;
> (d) Whether the origin of the noise is natural or unnatural;
> (e) The volume and intensity of the background noise, if any;
> (f) The proximity of the noise to residential sleeping facilities;
> (g) The nature and zoning of the area within which the noise emanates;
> (h) The density of the inhabitation of the area within which the noise emanates;
> (i) The time of the day or night the noise occurs;
> (j) The duration of the noise;
> (k) Whether the noise is recurrent, intermittent, or constant; and
> (l) Whether the noise is produced by a commercial or noncommercial activity.
> (Ord. 466 N.S. § 1 (part), 1982)
>
> 9.07.030 Description of representative offensive conduct.
>
> The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this section, but said enumeration shall not be deemed to be exclusive namely:
>
> (h) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises there from.
>
> (i) Loading, unloading, opening boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, boxes, crates and containers.
>
> (j) Construction or repairing of buildings. The erection (including excavating), demolition, alteration or repair of any building or general land grading and contour activity using equipment in such a manner as to be plainly audible at a distance of fifty feet from the building other than between the hours of seven a.m. and seven p.m. except in case of urgent necessity in the interest of public health and safety, and then only with a permit from the zoning administrator, which permit may be granted for a period not to exceed three days or less while the emergency continues and which permit may be renewed for periods of three days or less while the emergency continues. If the building inspector should determine that the public health and safety will not be impaired by the erection, demolition, alteration or repair of any building or the excavation of streets and highways within the hours of seven p.m. and seven a.m., and if he shall further determine that loss or inconvenience would result to any party in interest, he may grant permission for such work to be done within the hours of seven p.m. and seven a.m. upon application being made at the time the permit for the work is awarded or during the progress of the work.

(l) Pile drivers, hammers, etc. The operation between the hours of seven p.m. and seven a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other appliance, the use of which is attended by loud or unusual noise except in case of urgent necessity in the interest of public health and safety, and then only with a permit from the building inspector or the director of public services authorizing such devices to be operated during the otherwise prohibited hours while the emergency continues.

(m) Blowers and motor driven cycles. The operating of any noise creating blower or power fan or any cycle powered by an internal combustion engine, the operation of which causes noise due to the explosion of operating gases or fluids, unless the noise from such blower or fan is properly muffled and such engine is equipped with a muffler device sufficient to reduce such noise to a level which will not disturb the surrounding neighborhood. The noise limits set forth in Section 23130 of the California Vehicle Code shall be deemed to be the applicable standard for noise emissions; provided, however, the basis for measuring such limits for devices operated on private property shall be a distance of fifty feet from the property line of the parcel of real property on which the device is located or where the neighboring property is lawfully devoted to residential use, within any point on such neighboring property which complies with the required yard setbacks as established in the zoning regulations for the applicable district. (Ord. 611 N.S. § 1, 1991; Ord. 466 N.S. § 1 (part), 1982)

4.9.3 Environmental Impacts of the Project

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a noise impact is considered significant if implementation of the proposed project under consideration would do any of the following:

- expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- expose people residing or working in the project area to excessive aircraft source noise levels; or
- expose persons to or generation of excessive groundborne vibration or groundborne noise levels.

Based on the guidelines listed above, the following quantitative thresholds have been applied for this impact analysis to determine whether above guidelines have been adhered to for the proposed project:

- **Construction Impacts.** Short-term construction noise impacts would be significant if noise levels exceed applicable City standards (65 dB L_{dn}, 50 dB L_{eq}, 70 dB L_{max}) at any sensitive receptors, or result in a substantial increase (i.e., 3 dB) in ambient noise levels at offsite existing nearby noise-sensitive land uses; or if construction activities were to occur outside exempted hours, or all construction equipment is not properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications.
- **Transportation Impacts.** Long-term transportation noise impacts would be significant if noise levels exceed applicable City standards (65 dB L_{dn}) or result in a substantial increase (i.e., 3 dB) in ambient noise levels.

- **Stationary and Area Noise Impacts.** Long-term stationary and area noise impacts would be significant if project-generated noise levels exceed applicable City standards (presented in Table 4.9-5 of this document) or result in a substantial increase (i.e., 3 dB) in ambient noise levels.

- **Land Use Compatibility Impacts.** Land use compatibility impacts would be significant if noise levels from mobile or stationary sources (including airport noise exposure) exceed applicable City standards (65 dBA L_{dn}, Table 4.9-5) or State of California Title 24 Noise Standards for Detention Facilities (70 dB L_{eq} daytime and 45 dB L_{eq} nighttime) at proposed noise-sensitive land uses.

- **Vibration Impacts.** Vibration impacts would be significant if levels exceed the Caltrans-recommended standard of 0.2 in/sec PPV with respect to the prevention of structural damage for normal buildings or the FTA maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at nearby vibration-sensitive land uses.

The proposed project does not have any permanent sources of groundborne vibration. Therefore, this resource is not discussed further in this analysis.

IMPACT EVALUATION METHODOLOGY

To assess potential mobile-, stationary-, and area-source noise impacts, noise-sensitive receptors and their relative exposure were identified. The thresholds of significance applied in this analysis primarily address the exterior noise standards established by the City. Unless otherwise stated, an exceedance of interior-noise-level standards would not occur if exterior-noise standards are achieved because of sufficient exterior-to-interior noise reduction of common buildings.

The FHWA Traffic Noise Prediction Model was used to model traffic noise levels along affected roadways, based on daily volumes and the distribution thereof from the traffic analysis prepared for full project buildout. The project's contribution to the existing traffic-source noise levels along area roadways was determined by comparing the modeled noise levels at 50 feet from the centerline of the near travel lane under no project and plus project conditions.

The Master Reuse Plan's land use compatibility with 2025 traffic source noise levels was determined by comparing modeled noise levels at proposed noise-sensitive receptors under existing plus project conditions. Stationary noise sources were estimated based on the community noise survey and the site plan for the proposed Master Reuse Plan. Field measurements and standard noise propagation calculations were used to predict noise levels at adjacent sensitive receptors. Land use compatibility between conflicting land uses was determined based on the proposed land uses, adjacent parcels (including airport exposure), and existing zoning.

Vibration sources and levels were determined based on methodology recommended by the FTA manual *Transit Noise and Vibration Impact Assessment* (FTA 2006).

Project Impacts

Impact 4.9-1: Exposure of Sensitive Receptors to Temporary Construction-Generated Noise in Excess of Applicable Standards

Construction activities that would occur on the CDCR property would include site preparation (e.g., demolition, excavation, grading, and clearing), trenching, pouring of concrete foundations, paving, steel structure erection, exterior enclosure, interior buildout, equipment installation, finishing, and cleanup. No pile driving or rock blasting is anticipated to occur.

Construction noise levels would fluctuate depending on the particular type, number, and duration of usage for the various pieces of equipment. Construction noise would also depend on the types of construction activities

occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the vicinity of the receiver. Construction generally occurs in several discrete stages, with each operation varying the equipment mix and the associated noise characteristics. These stages alter the characteristics of the noise environment generated on the CDCR property and in the surrounding community for the duration of the construction process.

The site preparation phase typically generates the most substantial noise levels because of onsite equipment associated with grading, compacting, and excavation. Site preparation equipment includes backhoes, bulldozers, and loaders; excavation equipment such as graders and scrapers; and compaction equipment. A detailed construction equipment list is not currently available. However, Table 4.9-6 lists the noise levels typically generated by various types of construction equipment that are likely to be used at a construction site.

Table 4.9-6
Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (dB) at 50 feet
Air Compressor	78
Asphalt Paver	77
Backhoe	78
Compactor	83
Concrete Breaker	82
Concrete Pump	81
Concrete Saw	90
Crane, Mobile	81
Dozer	82
Front-End Loader	79
Generator	81
Grader	85
Hoe Ram Extension	90
Jack Hammer	89
Pneumatic Tools	85
Rock Drill	81
Scraper	84
Trucks	74–81
Water Pump	81

Notes: dB = A-weighted decibels.
All equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture specified noise levels for each piece of heavy construction equipment.
Sources: Bolt Beranek and Newman Inc. 1981:8-5, FTA 2006:12-6, 12-7

As indicated in Table 4.9-6, operational noise levels for typical construction activities would range from 74 to 90 dB at a distance of 50 feet. Continuous combined noise levels generated by the simultaneous operation of the loudest pieces of equipment would result in noise levels of 90 dB at 50 feet. Accounting for the usage factor of individual pieces of equipment, construction activities that would occur under the Master Reuse Plan would be

expected to result in hourly average noise levels of 86 dB L_{eq}, at a distance of 50 feet. Maximum noise levels generated by construction activities are not predicted to exceed 90 dB L_{max} at 50 feet.

The nearest offsite noise-sensitive receptor in the vicinity of the Estrella or CAL FIRE facility is the single-family residential land use located approximately 1,150 feet north of the acoustical center of the CAL FIRE site. The nearest offsite noise-sensitive receptor near the CDCR property in the vicinity of the proposed reentry facility is the single-family residential land use located approximately 750 feet north of the acoustical center of the reentry facility site and approximately 1,150 feet north of the acoustical center of the CAL FIRE site. Noise from localized point sources (such as construction sites) typically decreases by 6 to 7.5 dB per doubling of distance (DD) from source to receptor (see Table 4.9-6). Conservatively assuming an attenuation rate of 6 dB/DD, construction operations and related activities are predicted to generate daytime exterior hourly noise levels of 58 dB L_{eq} and 62 dB L_{max} at the nearest noise-sensitive receptor to the CAL FIRE site (less for activities at the Estrella site). Construction activities at the reentry site would result in slightly higher noise level of 62 dB L_{eq} and 66 dB L_{max} at this same receptor because of the closer proximity of the reentry site to this receptor.[1] It is should noted that construction activities occurring in the city of Paso Robles are considered exempt during daytime hours only.

Implementation of the Master Reuse Plan would result in a short-term increase in traffic on the local roadway network. It is expected that up to 788 construction-related traffic trips would occur during the periods of maximum construction activity. Construction-related traffic would be distributed over the roadway network shown in Table 4.9-4 and identified in Section 4.11, "Transportation." Typically, traffic must double to create an increase in perceptible traffic noise (+3 dB or more) (Caltrans 1998:N-96). Because all affected roadways have an ADT of at least 3,620 vehicles (see Table 4.9-4), an increase of 788 trips would not double the current traffic level on any affected roadways and subsequently would not result in a substantial increase in average daily traffic noise. Therefore, construction-related traffic on affected segments would not increase traffic noise levels.

As stated, project-generated construction traffic would not create a substantial increase in average local traffic noise levels or cause noise in excess of applicable standards. In addition, noise from construction activities could reach a maximum of 62 dB L_{eq} and 66 dB L_{max} at the nearest off-site noise-sensitive receptor. Hourly L_{eq} noise levels would exceed the stationary noise source standards established by the *City of Paso Robles General Plan* as shown in Table 4.9-5 and would be more than 3 dB above existing ambient noise levels (see Table 4.9-3), which would result in a substantial temporary increase in noise during nonexempt hours. L_{max} noise levels would not exceed ambient noise levels or standards established by the *City of Paso Robles General Plan* (Tables 4.9-3 and 4.9-5).

With implementation of the Master Reuse Plan, noise from construction activity that occurs between 7 a.m. and 7 p.m. each day is exempt from the provisions of the applicable noise regulations under City of Paso Robles Code of Ordinances Section 9.07.030(i). CDCR proposes to conduct noise-generating construction activities during these hours. However, if construction activities by contractors were to occur during nonexempt noise-sensitive hours (i.e., evening, nighttime, and early morning) or if construction equipment is not properly equipped with noise control devices to reduce noise as much as is feasibly possible, project-generated noise levels from construction sources could exceed the applicable standards at nearby noise-sensitive receptors and could result in a substantial temporary increase in the ambient noise environment. Therefore, this impact would be ***potentially significant*** *(Impact 4.9-1).*

Impact 4.9-2: Exposure of Sensitive Receptors to Permanent Transportation-Generated Noise in Excess of Applicable Standards

Under the Master Reuse Plan, long-term operation of project facilities would result in an increase in ADT volumes on the local roadway network, and consequently an increase in noise levels from traffic sources along affected segments. To examine the effect of project-generated traffic increases, traffic noise levels associated with

[1] The equation for acoustical attenuation is Initial Level - (20.5*(LOG(Wanted Distance/Initial Distance))). Here it would be 86-(20.5*(LOG(1150/50))) and 90-(20.5*(LOG(1150/50))).

the Master Reuse Plan were calculated for roadway segments in the project area using the FHWA Highway Noise Prediction Model (FHWA-RD-77-108). Traffic noise levels were modeled under existing conditions. ADT volumes and the distribution thereof were obtained from the traffic analysis presented in Section 4.11, "Transportation." Vehicle speeds and truck volumes on local area roadways were determined based on field observations. Table 4.9-7 summarizes the modeled traffic noise levels at 100 feet from the centerline of affected roadway segments in the project area. Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths.

Table 4.9-7
Predicted Vehicular Traffic Noise Levels—Existing Conditions

Roadway	From	To	L_{dn} (dBA) at 100 Feet from Roadway Centerline			Significant Impact?
			No Project	Master Reuse Plan	Change	
SR 46	U.S. 101 southbound ramp	the West	68.0	68.2	0.2	No
SR 46	U.S. 101 northbound ramp	Buena Vista Drive	69.0	69.4	0.4	No
SR 46	Buena Vista Drive	Golden Hill Road	70.2	71.1	0.9	
SR 46	Golden Hill Road	Union Road	69.4	70.0	0.6	No
SR 46	Union Road	Airport Road	71.1	71.7	0.6	No
SR 46	Airport Road	Dry Creek Road	69.8	69.8	0.0	No
SR 46	Dry Creek Road	The East	69.3	69.3	0.0	No
Dry Creek Road	SR 46	Airport Road	54.3	54.3	0.0	No
Golden Hill Road	Union Road	the South	57.6	57.9	0.3	No
Buena Vista Drive	SR 46	the North	56.0	56.1	0.1	No
Golden Hill Road	SR 46	the North	55.0	55.0	0.1	No
Golden Hill Road	SR 46	Union Road	56.6	56.6	0.1	No
Union Road	SR 46	Golden Hill Road	55.7	56.3	0.6	No
Union Road	Golden Hill Road	the West	54.3	54.7	0.4	No
Airport Road	SR 46	Dry Creek Road	55.9	57.9	2.0	No
Airport Road	Dry Creek Road	The North	54.2	55.9	1.7	No

Notes: dBA = A-weighted decibels; L_{dn} = day-night noise level; SR = State Route; U.S. 101 = U.S. Highway 101. Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features; or noise contribution from other sources. See modeling results in Appendix E for further detail.
Source: Modeling performed by AECOM in 2010

The modeling performed shows that the Master Reuse Plan would result in traffic noise level increases up to +2.0 dB L_{dn} compared to noise levels without the project, which is not a substantial increase in ambient noise levels.

With implementation of the Master Reuse Plan, predicted permanent transportation-generated noise would not expose sensitive receptors to a substantial increase in ambient noise levels in excess of applicable standards (3 dB or greater) . As a result, this impact would be ***less than significant*** *(Impact 4.9-2).*

Impact 4.9-3: Exposure of Sensitive Receptors to Permanent Stationary Source–Generated Noise in Excess of Applicable Standards

Implementation of the Master Reuse Plan could result in the introduction of several on-site stationary noise sources associated with the support and operation of on-site facilities. Stationary noise sources associated with facility operations could include rooftop HVAC equipment; mechanical equipment; emergency electrical generators; parking lot activities; and loading dock operations.

Detention and medical facilities generally incorporate outdoor paging systems and alarms. The noise levels associated with the operation of these sources are described separately below.

Public Address System

Public address (PA) systems would be installed throughout the proposed Estrella, CAL FIRE, and reentry facilities. The exact number and orientation of PA system components have not yet been determined. Based on noise measurements conducted at similar detention facilities, noise levels for outdoor correctional PA systems can reach intermittent levels of approximately 70–90 dB L_{max} at 50 feet. The operation of PA systems is generally intermittent by nature (i.e., less than approximately 1 minute in duration). Although PA announcements may be audible for brief periods of time at nearby noise-sensitive receptors, particularly during the quieter evening and nighttime hours, predicted intermittent noise levels would not be anticipated to exceed noise standards typically recommended for the protection of human annoyance and sleep disruption.

The nearest off-site noise-sensitive land use is a single-family residence located approximately 750 feet north of the reentry facility and 1,150 feet north of the CAL FIRE facility. Accounting for typical attenuation rates of 6 dB/DD and shielding provided by on-site structures, noise levels attributed to the PA system would range from 45 dB to 65 dB L_{max} at the nearest residential receptor. This would be less than the maximum noise-level standards set in the *City of Paso Robles General Plan* Noise Element of 70 dB L_{max} and 65 dB L_{max}, for daytime and nighttime periods, respectively (Table 4.9-5).

Mechanical HVAC Equipment

HVAC equipment could be a primary noise source associated with commercial or industrial uses. HVAC equipment is often mounted on rooftops, located on the ground, or located within mechanical rooms. The noise sources could take the form of fans, pumps, air compressors, chillers, or cooling towers. Noise levels from HVAC equipment vary significantly depending on unit efficiency, size, and location, but generally range from 45 to 70 dB L_{eq} at a distance of 50 feet (EPA 1971:57). Accounting for typical attenuation rates of 6 dB/DD and shielding provided by on-site structures, noise levels attributed to HVAC mechanical systems operating at the Estrella, CAL FIRE, and reentry facilities would not be anticipated to exceed stationary-source noise level criteria in the *City of Paso Robles General Plan* at the nearest noise-sensitive receptor.

Emergency Electrical Generators

Emergency generators supply necessary power requirements to vital systems within the facilities, ensuring public safety and the health and safety of residents and correctional personnel. Emergency generators are typically operated under two conditions: loss of main electrical supply (infrequent) or preventive maintenance/testing (occurs on a weekly basis). This analysis focuses on routine preventive maintenance and testing operations, which are conducted on a periodic basis. Detailed plans for the locations and types of emergency electrical generators for the Estrella, CAL FIRE, and reentry facilities were not available. Reference noise-level measurements conducted for emergency generators with rated power outputs from 25 kilowatts (kW) to 220 kW resulted in noise levels ranging from 61 to 73 dB L_{eq} and 63–84 dB L_{max}. Based on these reference noise levels, emergency electrical generators located within 700 feet of noise-sensitive land uses could potentially exceed the level specified by the City for daytime stationary-source noise, 50 dB L_{eq}. In addition, generators located within 1,200 feet of noise-sensitive land uses could potentially exceed the level specified in the *City of El Paso de Robles General Plan* for

nighttime stationary-source noise, 45 dB L_{eq}. The nearest noise-sensitive receptor in the project vicinity is a single-family residence located approximately 750 feet from the reentry facility. The same residence is located 1,150 from the CAL FIRE facility. This residence is located within the City's 1,200-foot range of concern for nighttime stationary noise sources. Therefore, noise levels attributed to emergency back-up or preventative maintenance and testing operations could exceed *City of El Paso de Robles General Plan* stationary-source noise level criteria at nearby sensitive receptors.

Parking Lot Activities

The Master Reuse Plan would include five parking lots: three for the Estrella Adult Correctional Facility (eastern and western staff lots and visitor lot), one for the CAL FIRE facility, and one for the reentry facility. The proposed parking lots would not be located adjacent to any noise-sensitive land uses. During the hours of peak parking demand, 6 a.m. to 2 p.m., approximately 713 parking events would occur with implementation of the Master Reuse Plan (refer to Appendix D). Activities making up a single parking event included vehicle arrival, limited idling, occupants exiting the vehicle, door closures, conversations among passengers, occupants entering the vehicle, startup, and departure of the vehicle.

Noise-level measurements conducted for similar parking lot activities indicate that average sound exposure levels (SEL) associated with a single parking event are approximately 71 dB SEL at distance of 50 feet. Based on a parking demand of 713 cars and assuming a standard attenuation rate of 6 dB/DD, the combined noise level from parking lot activities would be 37.7 dB L_{eq} at the nearest noise-sensitive receivers located approximately 750 feet north of the reentry facility. This would be less than City's stationary-source noise performance standards of 50 dB L_{eq} and 45 dB L_{eq} for daytime and nighttime periods, respectively.

The combined noise level from parking lot activities would be less than the City's stationary-source noise performance standards of 50 dB L_{eq} and 45 dB L_{eq} for daytime and nighttime periods, respectively.

Loading Dock and Delivery Activity

Noise sources associated with loading dock and delivery activities can include trucks idling, onsite truck circulation, trailer-mounted refrigeration units, pallets dropping, and the operation of forklifts. Noise monitoring conducted at similar loading docks indicates that typical hourly average noise levels range from 55 to 60 dB L_{eq} and from 80 to 84 dB L_{max} at a distance of 50 feet. The nearest noise-sensitive receptor is located approximately 1,150 feet from the proposed warehouse at the CAL FIRE facility. No warehouse facilities are proposed for the reentry facility. Exposure to the noise source would result in loading dock and delivery noise levels up to 34 dB L_{eq} and 56 dB L_{max}, respectively, at the residential property line. With loading dock and delivery activities taking place exclusively during daytime hours, associated noise levels would be less than the City's hourly performance criteria of 50 dB L_{eq} and 70 dB L_{max}.

Other Stationary Noise Sources

Additional intermittent noise sources attributable to operation of the Master Reuse Plan include noise from the opening and closing of entries, adult voices, various mechanical equipment, and the use of maintenance equipment. Such noise-generating activities occur infrequently and are generally intermittent. Because of the infrequent and intermittent nature of these noise sources, it is not feasible to address the individual noise impacts. Because such noise events occur infrequently and would be similar to noise events and noise levels already occurring in the project vicinity, significant noise level increases (i.e., 3–5 dB or greater) at nearby noise-sensitive receptors would not be anticipated.

With implementation of the Master Reuse Plan, most of the stationary noise sources that would be located at project facilities (i.e., parking lot activities, loading dock and delivery activity, mechanical HVAC equipment, PA system) would not result in noise levels at nearby noise-sensitive receptors that exceed the applicable City nontransportation (stationary) noise source

criteria. Therefore, these noise sources would result in less-than-significant impacts. However, operation of emergency electrical generators located at proposed facilities could exceed stationary noise source criteria without additional shielding. As a result, this impact would be ***potentially significant*** *(Impact 4.9-3).*

Impact 4.9-4: Land Use Compatibility of On-Site Sensitive Receptors with the Ambient Noise Environment

The State of California has established interior noise compatibility standards for prisons within Title 24 of the California Code of Regulations. The section states: "Housing areas shall be designed and constructed so that the average noise level does not exceed 70 decibels during periods of activity and 45 decibels [L_{eq}] during sleeping hours." The City has also established exterior noise standards of 60 dB L_{dn} for residential land uses, but given that the only effect considered here is within the boundaries of the CDCR property, the City's standards are not considered.

Based on the noise monitoring conducted at the CDCR property, average daytime noise levels currently range from approximately 45 to 54 dB L_{eq} and 24-hour noise levels range from 58 to 60 dB L_{dn}. Therefore, assuming an average exterior-to-interior noise reduction of 25 dB, noise levels from exterior sources would range from 20 to 29 dB L_{eq} and 33–35 dB L_{dn}. Implementation of the Master Reuse Plan would not result in a substantial increase in traffic noise levels along area roadways; moreover, increased traffic noise levels from Airport Road adjacent to the CDCR property would not result in an overall increase in the ambient noise environment at on-site noise sensitive locations (refer to Impact 4.9-2, "Exposure of Sensitive Receptors to Permanent Transportation-Generated Noise in Excess of Applicable Standards"). Intermittent noise events associated with the Master Reuse Plan, such as the use of PA systems, would occur infrequently and only for brief periods of time, and therefore would have a minimal effect on the noise environment.

The CDCR property is located approximately 1,500 east of the Paso Robles Municipal Airport. The proposed Estrella and CAL FIRE facilities would be closest to airport operations. Because of the close proximity of the airport, aircraft noise is audible throughout the CDCR property. The eastern portion of the CDCR property is located within the 55-dBA noise contour of the airport and the southeastern most corner of the Estrella Adult Correctional Facility (primarily a parking lot) is located within the 60-dBA noise contour (see Exhibit 4.9-4). Based on measurements of ambient noise levels obtained at the CDCR property and the noise contours for the airport land use plan exterior noise levels at the Estrella and the CAL FIRE facilities would not exceed 65 dB L_{dn} (see Exhibit 4.9-4). In addition, assuming an average exterior-to-interior noise reduction of 25 dB, predicted ambient interior noise levels are anticipated to be less than 40 dB L_{dn}, which is below applicable noise standards.

With implementation of the Master Reuse Plan, predicted ambient exterior and interior noise levels would not exceed the state's recommended daytime or nighttime noise compatibility standards for prisons of 70 dB L_{eq} and 45 dB L_{eq}, respectively; nor would noise levels exceed applicable City noise standards or a expose sensitive receptors to a substantial increase in ambient noise levels. As a result, this impact would be ***less than significant*** *(Impact 4.9-4).*

Impact 4.9-5: Exposure of Sensitive Receptors to Temporary Increases to Groundborne Vibration in Excess of Applicable Standards

With implementation of the Master Reuse Plan, construction and demolition activities could result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Vibration sources during construction would be similar at all three facilities. Because the same types of construction equipment would be used at each site. Groundborne vibration levels caused by various types of construction equipment are summarized in Table 4.9-8. The representative vibration levels identified for various construction equipment types show that sensitive receptors located close to construction activities could be exposed to groundborne vibration levels exceeding the thresholds of significance for exposing existing residential areas to peak particle velocities.

To evaluate vibration on nearby sensitive receptors, the minimum distance needed for vibration levels to be reduced to within applicable standards was calculated using FTA-recommended vibration propagation methods.

Table 4.9-8 Representative Vibration Source Levels for Construction Equipment			
Equipment		PPV at 25 feet (in/sec)[1]	Approximate Lv (VdB) at 25 feet[2]
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.170	93
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Notes:
[1] Where PPV is the peak particle velocity.
[2] Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.
Source: Federal Transit Administration 2006:12-12

Based on baseline vibration levels from Table 4.9-8, any sensitive receptor located within 45 feet of construction activities could be exposed to VdB levels exceeding 80 VdB and any sensitive receptor within 15 feet of construction activities could be exposed to vibration levels exceeding 0.2 PPV. The nearest sensitive receptor to proposed construction activities at the reentry facility is 750 feet, at the CAL FIRE facility 1,150 feet, and at the Estrella Adult Correctional Facility is 1,750 feet. Because no sensitive receptors are within 15 feet of construction activities, groundborne vibration levels attributable to construction activities would not exceed applicable standards at adjacent sensitive receptors.

Implementation of the Master Reuse Plan would not result in the exposure of sensitive receptors to groundborne vibration in excess of applicable standards. Therefore, this impact would be ***less than significant*** *(Impact 4.9-5).*

4.9.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following noise impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.9-2: Exposure of Sensitive Receptors to Permanent Transportation-Generated Noise in Excess of Applicable Standards

Impact 4.9-4: Land Use Compatibility of Onsite Sensitive Receptors with the Ambient Noise Environment

Impact 4.9-5: Exposure of Sensitive Receptors to Temporary Increases to Groundborne Vibration in Excess of Applicable Standards

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The following impacts were identified as potentially significant or significant. Mitigation to reduce these impacts to a less-than-significant level is recommended below:

Mitigation Measure 4.9-1: Exposure of Sensitive Receptors to Temporary Construction-Generated Noise in Excess of Applicable Standards

CDCR will implement the following noise-reducing measures during all noise-generating construction activities:

- Conduct all noise-generating construction activities between 7 a.m. and 7 p.m., which is consistent with the City Noise Ordinance.
- Properly maintain construction equipment per manufacturers' specifications and fit equipment with the best available noise suppression devices (e.g., mufflers, silencers, wraps). All impact tools (e.g., jackhammers) will be shrouded or shielded and all intake and exhaust ports on power equipment will be muffled or shielded.
- Do not idle construction equipment for extended periods of time (i.e., more than 5 minutes) in the vicinity of noise-sensitive receptors.
- Locate fixed/stationary equipment (such as generators, compressors, rock crushers, and cement mixers) as far as possible from noise-sensitive receptors.
- Designate a disturbance coordinator, who will post contact information in a conspicuous location near the entrance so that it is clearly visible to nearby receptors most likely to be disturbed. The coordinator will manage any complaints resulting from the construction noise and will contact nearby noise-sensitive receptors, advising them of the construction schedule. If a complaint about construction noise is received more than once by an individual noise-sensitive receptor, CDCR will retain a qualified acoustical consultant to ensure compliance with applicable standards.

With implementation of the above mitigation measure, this impact would be reduced to a less-than-significant level.

Mitigation Measure 4.9-3: Exposure of Sensitive Receptors to Permanent Stationary Source–Generated Noise in Excess of Applicable Standards

To ensure that generator noise does not exceed applicable noise standards at nearby sensitive receptors, CDCR will locate new generators indoors, within an enclosure, or behind noise barriers to ensure a reduction of at least 20 dB outside the shielding, as measured at the property line, relative to normal operations.

Implementation of this mitigation measure would ensure that noise levels from generator operations would be in compliance with applicable noise standards. This impact would be reduced to a less-than-significant level.

Significant Impacts That Would Remain Significant and Unavoidable

No noise impacts were identified as significant and unavoidable.

4.10 PUBLIC SERVICES

This section describes the existing public services that serve the CDCR property and evaluates the Paso Robles Property Master Reuse Plan's (Master Reuse Plan) potential effect on public services and facilities. This section covers:

- police services,
- fire protection services, and
- schools.

The Master Reuse Plan would not result in impacts on parks because it does not propose the construction of new residences, which would result in an increased demand for new parks and would increase the use of existing park facilities. This issue is not addressed further in this DEIR.

The issue of impacts on local hospital service was raised during the notice of preparation (NOP) comment period. State prisons have generally utilized local hospitals for acute medical treatment (which places little demand on beds because of the brief nature of the treatment), or for subacute treatment when prison medical facilities are not available (which places higher demand on beds, because of the long-term nature of the treatment). Inmates selected to be housed at the proposed Estrella Adult Correctional Facility (Estrella Facility) would be screened to avoid individuals who have advanced or acute medical needs. Consolidated medical care facilities are being planned in other locations of California for inmates with these higher medical needs. Further, the proposed addition to the onsite health care center at the Estrella Facility would include mental health education and public outreach. Because the facilities that would operate under the Master Reuse Plan would typically house relatively healthy inmates, CDCR would most commonly utilize local hospital service for acute medical treatment that is beyond the level of treatment available at the on-site medical facility The need for this level of acute care would be infrequent. Regarding subacute care, although the majority of the inmates at the proposed Estrella Facility would be relatively healthy, subacute care would be needed on occasion. CDCR historically has not been able to consistently provide appropriate subacute care for inmates and has relied heavily on local hospitals. In 2005, a federal judge appointed the California Prison Health Care Receivership (CPR) with orders to improve CDCR's medical and mental health care system to constitutional standards. As part of the implementation of this federal mandate, CPR is in the process of expanding capacity to provide subacute medical care and mental health care by constructing new major prison health care facilities. The first of these has been approved in Stockton and is planned to be in place at the time the facilities under the Master Reuse Plan are activated. It is anticipated that these new facilities will eventually meet the subacute medical needs of the Master Reuse Plan and other facilities within the CDCR system, and will reduce local demands substantially while capacity is added. The potential for the project to increase demand for local hospital services would not be considered substantial and would not result in the need to expand existing ambulance and hospital facilities to the extent that an environmental impact would result. Therefore, this issue is not discussed further in the DEIR.

4.10.1 POLICE SERVICES

EXISTING CONDITIONS

The Paso Robles Police Department currently provides law enforcement and police protection services within the project vicinity. The department currently (as of March 2010) employs 36 sworn officers, although there are 46 sworn officer positions (Walton, pers. comm., 2010), and is composed of more than 100 full-time, part-time, and volunteer personnel. The department is divided into three divisions: administration, operations, and support services. The chief of police, a captain, and two lieutenants compose the administrative team, which is primarily accountable for day-to-day operational and policy decisions and for making recommendations to the Chief in promotional and disciplinary matters. The Operations Division consists of uniform patrol, traffic safety and reserve programs, K-9, Narcotics Task Force, . The Support Services Division consists of the Investigations Program (Detectives), Communications Program, Records Program, and the Community Services Program (City

of Paso Robles 2010). With a 2009 population of 29,950, the City of Paso Robles (City) currently provides 1.2 sworn officers per 1,000 residents, which is not consistent with the City's goal (Action Item 1 under General Plan Policy S-1C) of maintaining at least 1.4 sworn officers per 1,000 residents (City of Paso Robles 2003). Economic and budget factors are currently having the most drastic effect on service (Lewis, pers. comm., 2010).

The police department operates out of its headquarters on Park Street in Paso Robles, located approximately 3.5 miles southwest of the CDCR property. In 2009, the citywide average response time was 4 minutes. The police department indicated that there has been no major law enforcement issues related to the CDCR property, including the former Division of Juvenile Justice (DJJ) facility (Lewis, pers. comm., 2010).

A memorandum of understanding between the Paso Robles Police Department and CDCR was signed in October 2007 and establishes guidelines for the city police to respond to law enforcement needs at the former DJJ facility, including response to crimes committed in or around the facility.

CDCR has also entered into mutual aid agreements with the California Department of Mental Health, California Highway Patrol, Atascadero Police Department, and San Luis Obispo Sheriff's Department.

REGULATORY BACKGROUND

Federal and State Plans, Policies, Regulations, and Laws

No federal or state plans, policies, regulations or laws related to police services are applicable to the proposed project.

Local Plans, Policies, Regulations, and Ordinances

The Safety Element of the *City of El Paso de Robles General Plan* (City of Paso Robles 2003) contains one policy with one action item related to police protection service relevant to the project:

- **Policy S-1C:** Hazardous Exposure Minimization. Minimize hazards to people and property caused by fire, crime, and related services.
    - **Action Item 1.** *Police Service Standards.* Maintain a ratio of 0.5 non-sworn police personnel per 1,000 population and a ratio of 1.4 to 1.6 sworn police personnel per 1,000 population.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a police services impact is considered significant if implementation of the proposed project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts to maintain acceptable service ratios, response times, or other performance objectives for police services.

Project Impacts

Impact 4.10-1: Impacts on Police Protection Services

With implementation of the Master Reuse Plan, CDCR would continue to provide its own onsite security personnel (i.e., correctional officers/sworn peace officer) and outside law enforcement services would not be the primary law enforcement required to serve the Estrella Facility, reentry facility, and CAL FIRE sites. Therefore, it

is anticipated that the number of service calls would not substantially increase with implementation of the Master Reuse Plan because the general types of uses at the facilities would not change. Consistent with current operational procedures, any crime committed by visitors to the Estrella or reentry facility would be handled by the California Highway Patrol (CHP) or CDCR sworn peace officers. Further, if needed, it is anticipated that the City's police officers would be available to assist CDCR staff in responding to emergency events through the existing mutual-aid agreement between the Paso Robles Police Department and CDCR. According to staff at the Paso Robles Police Department, there are no existing issues or problems in providing law enforcement services to the project area (Lewis, pers. comm., 2010). Staff also indicated that the Master Reuse Plan would not substantially affect the current service levels for provision of law enforcement, as long as the City's role in the existing mutual aid agreement does not change. However, staff did indicate that budgetary constraints caused by the economic recession may stifle the ability of the Paso Robles Police Department to maintain current service levels (Lewis, pers. comm., 2010). Response times for police officers to the CDCR property would not increase because offsite improvements are not proposed that would interfere with local roadway systems, and the Master Reuse Plan would not substantially increase traffic volumes to the extent that unsafe conditions (requiring more police response) would be created along local roadways (see Section 4.11, "Transportation").

*Because it has sworn police officers; CDCR provides its own security personnel, existing mutual aid agreements would remain in effect for emergency events, local law enforcement officers would not be required to substantially increase service levels to the CDCR property, and response times to the CDCR property would not increase. Therefore, **less-than-significant** impacts on police services would occur (Impact 4.10-1).*

Proposed Mitigation Measures

LESS-THAN-SIGNIFICANT IMPACTS

All of the Master Reuse Plan's police protection impacts were identified as less than significant, and therefore no mitigation is required.

4.10.2 FIRE PROTECTION AND EMERGENCY SERVICES

EXISTING CONDITIONS

Emergency services for the CDCR property are provided by the City of Paso Robles Emergency Services Department. The department is staffed by 21 shift personnel (six captains and 15 firefighters), one fire chief, two battalion chiefs, and a secretary. The City of Paso Robles Emergency Services Department consists of two fire stations located on the west and east side of the Salinas River and the third at the Paso Robles Municipal Airport, which is adjacent to the CDCR property.

Emergency medical service (EMS) is the department's highest requested service, accounting for 69% of all emergency response activity in 2008. EMS calls are simultaneously responded to by an Emergency Services Department engine crew and private ambulance, which is typically provided by San Luis Ambulance (Bremer, pers. comm., 2010). The Emergency Services Department usually responds quicker than the ambulance to render initial care and stabilize the victim. The private ambulance then receives and transports the patient to the closest appropriate medical facility (City of Paso Robles 2008).

REGULATORY BACKGROUND

Federal and State Plans, Policies, Regulations, and Laws

No federal or state plans, policies, regulations or laws related to fire protection and emergency services are applicable to the proposed project.

CDCR would be required to secure the approval of the State Fire Marshal to ensure that proposed buildings and structures are constructed consistent with Title 24, California Building Codes Standards.

Local Plans, Policies, Regulations, and Ordinances

The Safety Element of the *City of El Paso de Robles General Plan* (City of Paso Robles 2003) contains one policy with one action item related to emergency services relevant to the project:

- **Policy S-1C:** Hazardous Exposure Minimization. Minimize hazards to people and property caused by fire, crime, and related services.
    - **Action Item 2.** *Emergency Services Standards.* Maintain a ratio of 0.8 to 1.3 firefighters per 1,000 population.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a fire protection and emergency services impact is considered significant if implementation of the proposed project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.

Project Impacts

Impact 4.10-2: Impacts on Fire Protection Services

Existing structures on the CDCR property are currently located within the service area of the City of Paso Robles Emergency Services Department. Development of the Master Reuse Plan would result in rehabilitating the existing buildings, as well as construction of new buildings that would require fire protection services in the event of a fire emergency. Existing and new facilities would include a fire safety system with alarms, extinguishers, and sprinklers that automatically activate in the event of a fire emergency. CDCR would coordinate with the Emergency Services Department regarding the proposed design of the fire suppression system before implementation of the Master Reuse Plan. Reactivation of the CAL FIRE conservation camp would provide the CDCR property with on-site, backup fire protection and emergency services when staff is available; however, the Emergency Services Department would be the first responders to the CDCR property. Although the proposed Master Reuse Plan would add new structures to the site, implementation of the plan would not extend the service boundary of the City's Emergency Services Department and would not adversely affect response times. Further, proposed structures and emergency access roadways would be designed to meet the City's emergency and fire protection standards. Battalion Chief Kevin Taylor indicated that the Master Reuse Plan would have no effect on the ability of the Emergency Services Department to serve the project, no effect on service levels, and no effect on response times (Taylor, pers. comm., 2010). It should also be noted that CDCR would pay the appropriate fee-schedule fees for fire services to the City.

Implementation of the proposed Master Reuse Plan would not extend the service boundary of the City's Emergency Services Department and would not increase response times, and CDCR would include fire safety systems on all occupied structures, would provide backup emergency response through CAL FIRE, and would pay appropriate fee-schedule-based development impact fees for fire protection services and 911 emergency response. Therefore, implementation of the Master Reuse Plan would have a ***less-than-significant*** *impact on fire protection and emergency services (Impact 4.10-2).*

PROPOSED MITIGATION MEASURES

Less-than-Significant Impacts

All of the Master Reuse Plan's fire protections impacts were identified as less than significant, and therefore no mitigation is required.

4.10.3 SCHOOLS

EXISTING CONDITIONS

The majority (51%) of former DJJ employees and their families reside primarily in Paso Robles, but also live in other communities in the region (see Section 4.4, "Population, Employment, and Housing"). Assuming the same distribution of staff, it is projected that the same majority of the new staff and their families would reside in Paso Robles and would enroll students in school districts serving those communities. Based on the distribution pattern of former DJJ employees, the community that would receive the next largest percentage of employees (15%) would be Atascadero, followed by Templeton (6%). All other communities are anticipated to receive 3% or fewer of the new employees; therefore, the following analysis of schools will focus on the communities of Paso Robles, Atascadero, and Templeton.

Paso Robles Public Schools (PRPS) is the school district serving Paso Robles and the surrounding region. PRPS operates 12 schools (six elementary schools, two middle schools, one high school, one alternative school, one continuation school, and one community day school), with a total enrollment of approximately 6,700, which according to Assistant Superintendant Gary Hoskins, is down approximately 100 students from last year. Mr. Hoskins classified this as "declining enrollment" and indicated that this decrease in student enrollment, combined with an increase in classroom size (caused by budget-related layoffs), has resulted in empty elementary school classrooms. According to Mr. Hoskins, the district's elementary and high schools have remaining capacity, but the middle school is at capacity. No overcrowding has occurred at these schools (Hoskins, pers. comm., 2010).

Atascadero Unified School District serves the city of Atascadero and the surrounding region. The district operates 12 schools (eight elementary schools, one junior high school, one high school, one alternative school, and one continuation school), with a total enrollment of 4,945. Average class size, districtwide, is 24.5, and the district employs 250 teachers (full-time equivalent) (DOE 2010). Like PRPS, Atascadero Unified School District is experiencing declining enrollment (down from 6,100 in the 1990s), and budget cuts are forcing reduction in staff and larger classroom sizes, resulting in empty classrooms. According to district staff, multiple classrooms on all campuses are either unused or are being used as storage. (Soto, pers. comm., 2010).

Templeton Unified School District (TUSD) serves the unincorporated town of Templeton and the surrounding area. The district operates seven schools (two elementary schools, one middle school, one high school, two alternative schools, and one continuation school), with a total enrollment of 2,371. Average class size, districtwide, is 23.9, and the district employs 109 teachers (full-time equivalent) (DOE 2010). According to school district staff, TUSD is also experiencing declining enrollment coupled with staff reduction resulting in empty classrooms. (Parks, pers. comm., 2010).

REGULATORY BACKGROUND

Federal and State Plans, Policies, Regulations, and Laws

No federal or state plans, policies, regulations or laws related to schools are applicable to the proposed project.

Local Plans, Policies, Regulations, and Ordinances

The Land Use Element of the *City of El Paso de Robles General Plan* (City of Paso Robles 2003) contains one policy related to schools that is relevant to the project:

- **Policy LU-4B:** Support the public school districts' efforts to ensure that new development mitigates its impacts to public schools, particularly in avoiding overcrowding conditions. The following programs should be implemented unless the City Council finds that specific economic, social, environmental or other considerations make infeasible implementation of the program or aspect of the program in a particular situation.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a schools impact is considered significant if implementation of the proposed project would:

- substantially increase school enrollment in any district that is near or over capacity and, as a result, cause the need to physically alter school facilities, the construction of which could cause significant environmental impacts.

Project Impacts

Impact 4.10-3: Impacts on School Facilities

Under the Master Reuse Plan, CDCR would employ as many as 998 staff at the CDCR property. These would be new staff positions; however, as discussed in Section 4.4, "Population, Employment, and Housing," many of the employees, including those from the former DJJ facility, may still reside within the county and surrounding communities. Nonetheless, to provide a conservative analysis, it is assumed that the Master Reuse Plan would result in 998 new employees, and that these employees and their school-age children, are expected to be dispersed throughout the region, with a majority residing in the communities of Paso Robles, Atascadero, and Templeton. A statewide survey of CDCR employees indicates that the average number of schoolchildren per CDCR employee is 0.79 (CDCR 1995). Therefore, the Master Reuse Plan would result in the generation of approximately 789 new students in the local area. The CDCR survey also separates student generation rates for elementary and high schools as follows: 0.60 K–8 student (0.45 elementary, 0.15 middle school) and 0.19 high school student per CDCR family. Based on these student generation rates, the Master Reuse Plan would generate approximately 449 elementary, 150 middle school, and 190 high school students.

Of the 789 new students, the Master Reuse Plan would add approximately 47 new students (assuming all new students and their families are relocating from outside the district, which is conservative) to TUSD. This is approximately 2% of the school's total enrollment. Even if the school were operating at full capacity, the project-generated students added to this district would not require construction of a new classroom. In addition, district staff indicated that the combination of declining enrollment and state budget cuts has resulted in empty classrooms throughout the district. District staff further indicated that TUSD would have capacity to enroll new students generated by the Master Reuse Plan (Parks, pers. comm., 2010).

Approximately 118 new students would attend schools in Atascadero Unified School District, which would be approximately 2% of the district's enrollment. More specifically, the Master Reuse Plan would add 67 elementary school students, 23 middle school students, and 28 high school students. Even if the district were operating at full capacity, the number of new students would not be substantial enough to require construction of a new classroom (assuming that the new elementary, middle, and high school students were distributed among the various elementary, middle, and high schools in the district, with no one school receiving a disproportionate amount of

new students). Furthermore, like TUSD, Atascadero Unified School District is not at full capacity, and is experiencing declining enrollment and increased classroom size, which has left multiple empty classrooms at every campus in the district (Soto, pers. comm., 2010).

It is anticipated that a large percentage of the new employees (51%) would reside in Paso Robles. Under the Master Reuse Plan, a total of 402 new students would be added to the PRPS enrollment (229 elementary school students, 76 middle school students, and 97 high school students), which is approximately 6% of the district's current enrollment. According to PRPS Assistant Superintendent Hoskins, no schools in the district are currently experiencing overcrowding, and the high school and elementary schools currently have capacity to receive the additional students, but the middle schools in the district are currently at capacity; therefore, an increase in new students could require additional classroom capacity (Hoskins, pers. comm., 2010). It is important to note that the assumption that all new students and their families would relocate from outside the district is very conservative. For instance, Superintendent Hoskins indicated that many of the former employees of the former DJJ facility still reside in Paso Robles, most now working at adult correctional facilities in the region; it is therefore reasonable to assume that many of the former DJJ employees, especially those who now have experience in adult corrections, could be hired to work for CDCR (although it is not possible to accurately estimate a specific percentage of the new positions that would be filled by former DJJ employees).

Students are generated by residential uses, not institutional uses (schools generally serve residents). However, the Master Reuse Plan would bring 998 new employment positions to the region, which could indirectly spur population growth by attracting new residents from outside the region to work at the proposed facilities. This student generation is therefore more accurately termed "indirect student generation," because it is the residential development that directly affects school capacity.

The City of Paso Robles is processing multiple applications for major housing developments. (For instance, if approved, the *Chandler Ranch Area Specific Plan* alone could provide more than 1,400 residential units.) Although employees new to the area could choose existing homes, proposed new-home development would far exceed any demand associated with employees from the Master Reuse Plan. Homes that are constructed in these communities would be subject to any adopted school impact fees, which are used to partially fund the construction of schools. Although these fees are not typically sufficient to fully fund construction costs, California Government Code Section 65996 has deemed that payment of school fees is full mitigation of school impacts under CEQA. In addition to school impact fees, school districts have a variety of other funding sources that offset the cost of constructing new schools, including matching state funds and various local bond fund opportunities (although many require voter approval).

Per AB 900, Section 15819.403, local mitigation costs will be provided by CDCR to local government and school districts pursuant to California Penal Code Section 7005.5 (c) and (d) (these local mitigation costs are unrelated to CEQA requirements). Pursuant to PC Sec 7005.5, CDCR would provide $800 per bed that is being constructed as part of the Master Reuse Plan project. Of this, CDCR will pay $400 per bed directly to the San Luis Obispo county superintendent of schools for allocation among affected local education agencies. CDCR would pay the remaining $400 per bed to the City of Paso Robles and San Luis Obispo County upon receipt of resolutions adopted by the governing body of City of Paso Robles and San Luis Obispo County indicating agreement by these entities regarding the specific allocations to each entity.

Because of the declining enrollment in the three school districts and the resulting empty classrooms, implementation of the Master Reuse Plan would not result in the need to expand or construct new school facilities. The only exceptions could be the two middle schools in the Paso Robles Public Schools District, which are currently at capacity. However, increases in population resulting from the new positions created by the proposed facilities would be accommodated in the existing and planned housing within Paso Robles. New housing developments would be required to pay school impact fees. Further, for direct impacts on schools, California Government Code Section 65996 has deemed that payment of school fees by residential developers is full mitigation of school impacts under CEQA. Pursuant to AB 900, Section 15819.403, CDCR would also contribute $600,000 to the Superintendent of San Luis Obispo County Schools for distribution to affected school districts, as a

result of the Estrella and reentry projects (AB 900 Community Mitigation Funds are not available for the CAL FIRE Conservation Camp). It is expected that school impacts would be ***less than significant*** *(Impact 4.10-3).*

PROPOSED MITIGATION MEASURES

Less-than-Significant Impacts

All of the Master Reuse Plan's schools impacts were identified as less than significant; therefore, no mitigation is required.

4.11 TRANSPORTATION

This section provides an evaluation of the Master Reuse Plan's transportation impacts. This analysis is based on traffic volume data collected in January 2009 and May 2010; site visits conducted January 2009 and February 2010; and incorporation, where appropriate, of data from local and regional transportation studies.

4.11.1 EXISTING CONDITIONS

EXISTING ROADWAY NETWORK

Exhibit 4.11-1 illustrates the existing street system serving the study area. U.S. Highway 101 (U.S. 101) and State Route (SR) 46 provide primary regional access to the study area. Access to the Paso Robles CDCR site would be provided from Airport Road and Dry Creek Road (referred to as Old Dry Creek Road in this document). Brief descriptions, including physical characteristics of principal roads and highways serving the study area, are detailed below.

U.S. 101 is a regional facility that traverses through San Luis Obispo County, continuing north to San Francisco and south to Los Angeles. Within the study area, U.S. 101 is a four-lane freeway with an interchange at SR 46 East.

SR 46 is an east-west, four-lane highway between U.S. 101 and Airport Road. East of Airport Road, SR 46 contains two travel lanes. SR 46 provides an east-west regional connection to Interstate 5 in the Central Valley and to Bakersfield and Fresno (via SR 41) to the east, and the coast to the west. Two signalized intersections are located along SR 46 in the project vicinity, at Buena Vista Drive and Golden Hill Road. During the peak summer months, this corridor experiences congestion in the westbound direction on Friday evenings and eastbound on Sunday afternoons.

Union Road is a two-lane arterial roadway that begins at River Road and continues in a north-east direction, crossing Golden Hill Road, and connecting to SR 46 East. Paso Robles Boulevard, the north leg of Union Road, dead ends north of SR 46 East south of Huerhuero Creek.

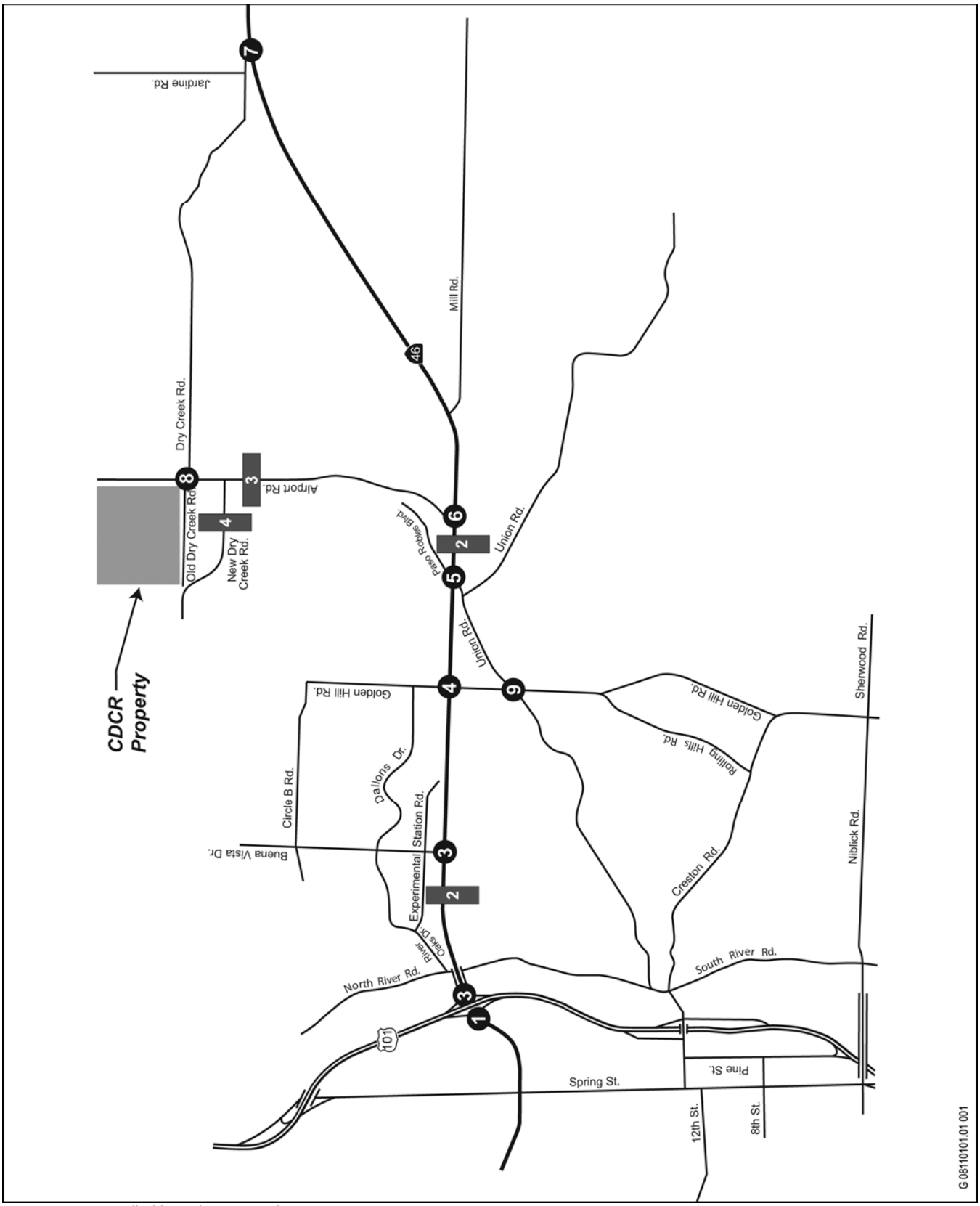
Airport Road is a north-south arterial roadway extending from SR 46 East past the CDCR property and Paso Robles Municipal Airport. Airport Road has two travel lanes, one in each direction.

Dry Creek Road is an east-west collector roadway extending from Jardine Road at the eastern edge of the city of Paso Robles to Airport Road. Old Dry Creek Road is referred to the segment of roadway bordering the southern edge of the CDCR property west of Airport Road and slightly offset to the north of Dry Creek Road. New Dry Creek Road is an east-west street extending west of Airport Road and intersecting Airport Road approximately 220 feet south of Old Dry Creek Road. New Dry Creek Road ties into Old Dry Creek Road approximately 2,300 feet west of Airport Road and terminates at Huerhuero Creek.

EXISTING TRANSIT NETWORK

The North County Shuttle provides bus service to Paso Robles, Templeton, and Atascadero. Paso Robles City Area Transit System provides bus service within Paso Robles. The San Luis Obispo Regional Transit Authority operates intercity bus service in San Luis Obispo County. However, no fixed-route transit service is provided to the CDCR property or on Airport Road.

The Paso Robles City Area Transit System operates a Dial-A-Ride service within the city limits Monday through Friday only, from 7 a.m. to 8 p.m. *Runabout* provides countywide Americans with Disabilities Act (ADA) paratransit service for qualified individuals within three-quarters mile of the fixed-route bus service. Runabout service operates from 7 a.m. to 6 p.m. Monday through Saturday.



Source: Data compiled by Fehr & Peers in 2010

Traffic Study Locations **Exhibit 4.11-1**

BICYCLE AND PEDESTRIAN NETWORK

The CDCR property is located approximately 3 miles northeast of Paso Robles' urbanized area. No bicycle and pedestrian facilities exist in the immediate project area. As described in Section 4.8, "Land Use and Planning," the CDCR property is surrounded by agricultural, low-intensity rural, business park, and institutional land uses with little or no pedestrian and bicycle activity. The City of Paso Robles recently adopted a Citywide *Bicycle Master Plan* (2009). The Plan includes goals, policies, and improvements to guide the City to becoming more bicycle-friendly. According to the plan, Class II bicycle lanes are planned along Airport Road, New Dry Creek Road, and the future connection to Union Road and Golden Hill Road. These facilities would provide a more direct means for bicyclists to access the CDCR property, and the City's impact fee program for residential development includes bicycle facility construction to aid in funding these improvements.

PROJECT DESCRIPTION

The extent of the analysis in this section was determined based upon an evaluation of the area within which traffic generated by the Master Reuse Plan may be sufficient to cause traffic conditions to degrade. Within the grounds of the Paso Robles CDCR facility, the Master Reuse Plan involves construction of the Central Coast Regional Secure Community Reentry Facility, the Estrella Adult Male Correctional Facility, and the CAL FIRE Conservation Camp. Traffic generation–related components of the Master Reuse Plan are described in detail below.

Central Coast Regional Secure Community Reentry Facility

The reentry facility would add 269 new staff on an average weekday with the following shift distribution:

- 16 new custodial employees during first watch (10 p.m. to 6 a.m.),
- 46 new custodial employees during second watch (6 a.m. to 2 p.m.),
- 37 new custodial employees during third watch (2 p.m. to 10 p.m.), and
- 170 new administrative employees (8 a.m. to 5 p.m.).

At the reentry facility, approximately 30 daily visitors are expected during the week, by appointment, between the hours of 8 a.m. and 9 p.m.

Estrella Adult Correctional Facility

The Estrella Adult Correctional Facility (Estrella Facility) would add 429 new staff on an average weekday with the following shift distribution:

- 35 new custodial employees during first watch (10 p.m. to 6 a.m.),
- 167 new custodial employees during second watch (6 a.m. to 2 p.m.),
- 71 new custodial employees during third watch (2 p.m. to 10 p.m.), and
- 156 new administrative employees (8 a.m. to 5 p.m.).

Visiting hours at the Estrella Facility would be limited to Saturday and Sunday from 8:30 a.m. to 3:30 p.m.; therefore, vehicle trips generated by visitors would only occur on weekends.

CAL FIRE Conservation Camp

The CAL FIRE Conservation Camp would add approximately 26 new staff on an average weekday with the following shift distribution:

- six new employees during first watch (10 p.m. to 6 a.m.),
- 10 new employees during second watch (6 a.m. to 2 p.m.), and

- 10 new employees during third watch (2 p.m. to 10 p.m.).

To present a conservative analysis, it was assumed that all 10 of the new employees on the second watch would arrive and depart the site during the traditional morning and evening peak hours (7–9 a.m. and 4–6 p.m.). Visitors to inmates of the interim CAL FIRE facility are accounted for in the visitor rates described above for the Estrella Facility.

ANALYSIS METHODS

Based on past studies in the area, observations, and consultation with the City of Paso Robles (City), the following nine intersections (i.e., study intersections) and four roadway segments were selected for evaluation in this analysis (see Exhibit 4.11-1):

Intersections

1. U.S. 101 Southbound Ramps and SR 46 East
2. U.S. 101 Northbound Ramps and SR 46 East
3. Buena Vista Drive and SR 46 East
4. Golden Hill Road and SR 46 East
5. Union Road and SR 46 East
6. Airport Road and SR 46 East
7. Jardine Road and SR 46 East
8. Airport Road and Old Dry Creek Road
9. Golden Hill Road and Union Road

Roadway Segments

1. Airport Road, between SR 46 East and Dry Creek Road
2. New Dry Creek Road west of Airport Road (future conditions only)
3. SR 46 East between U.S. 101 and Buena Vista Drive
4. SR 46 East between Union Road and Airport Road

The following input assumptions are used in this traffic analysis:

- The morning and afternoon peak-hour traffic analysis corresponds with the traditional urban commute a.m. (7–9 a.m.) and p.m. (4–6 p.m.) peak hours. The traffic associated with the morning and afternoon administrative and noncustodial shift changes (8 a.m. and 5 p.m.) is expected to yield the most conservative analysis.

- The trip distribution for future employees would be similar to the trip distribution for employees from the DJJ Facility, which closed in 2008, and therefore is based on this employee zip code data. See Section 4.4, “Population, Employment, and Housing,” for additional discussion. This distribution pattern is similar to U.S. Census journey-to-work data (2000) and the distribution pattern for administrative office employment from the City of Paso Robles Travel Demand Forecasting Model (Fehr & Peers 2009).

- The traffic operations analysis for study intersections was conducted using the procedures and methodologies contained in the *Highway Capacity Manual* (HCM) (Transportation Research Board 2000).

- The traffic operations analysis for study roadway segments was conducted using the daily roadway level of service methods in the City’s Circulation Element (2003).

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

Existing Traffic Volumes

Weekday peak-period intersection turning movement counts were collected in January 2009 and May 2010. Intersection counts were conducted during the morning (7–9 a.m.) and evening (4–6 p.m.) peak periods. Average daily traffic counts were conducted on the study roadway segments in April 2008.

The existing peak-hour intersection turning movement volumes and daily counts are displayed in Exhibit 4.11-2. The raw traffic counts are presented in Appendix E.

Level of Service Methods

The quality of roadway facility operations is described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined, from LOS A with the best operating conditions to LOS F with the worst operating conditions. LOS E represents "at-capacity" operations. Two methods were used to evaluate the study intersections: one method for the signalized intersections and another method for the unsignalized intersections as described below.

Signalized Intersections

For signalized intersections, the LOS methodology described in Chapter 16 of the HCM, published by the Transportation Research Board, was applied. This methodology evaluates a signalized intersection's operations based on average control delay. Control delay represents delay caused by signal operation but does not account for delays caused by on-street parking, driveways, pedestrians, and other friction factors. The average control delay for signalized intersections is calculated using the SYNCHRO analysis software and is correlated to an LOS designation as shown in Table 4.11-1.

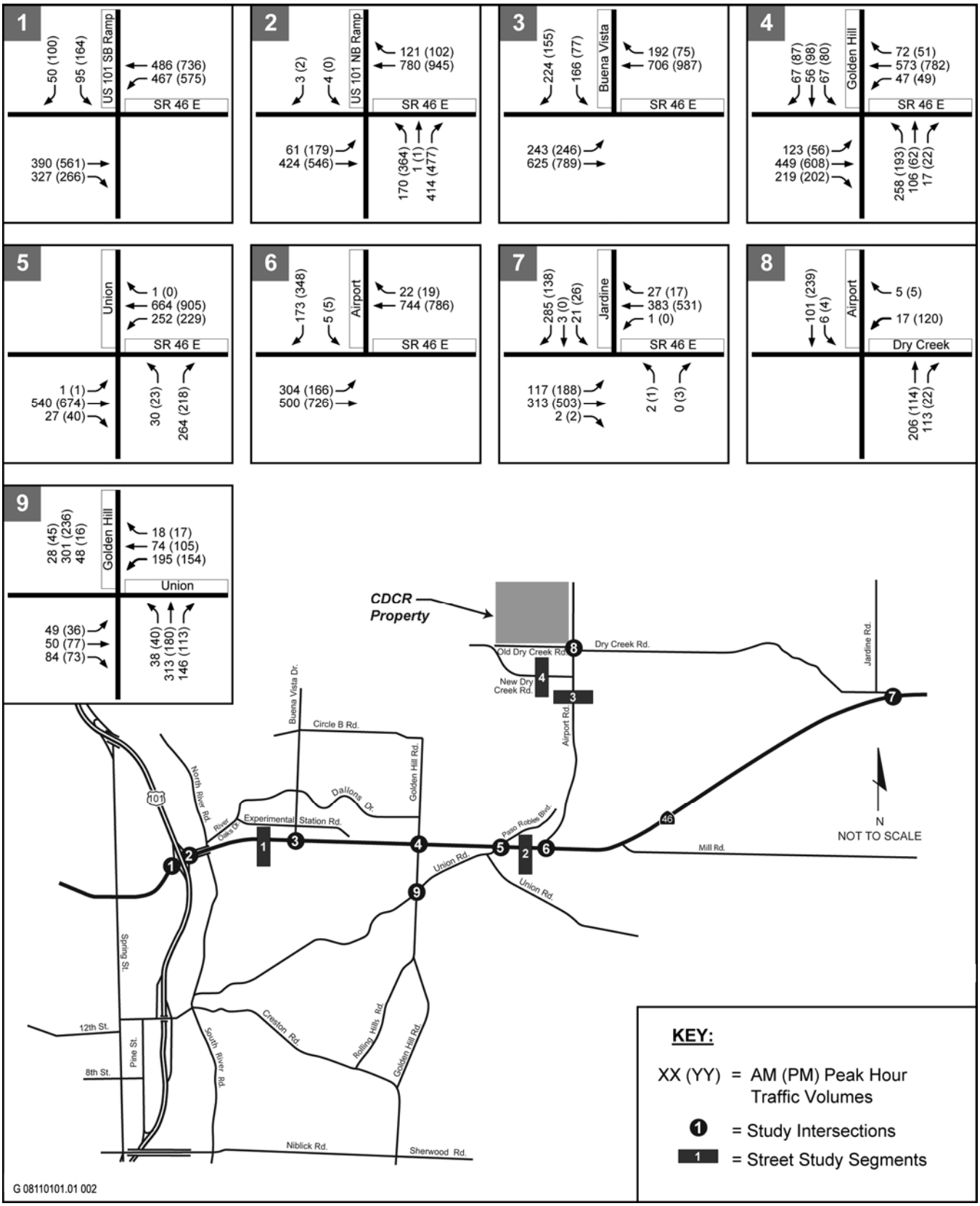
Table 4.11-1
Level of Service Definitions for Signalized Intersections

Level of Service	Average Stopped Delay per Vehicle (seconds)
A	≥10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Source: Transportation Research Board 2000

Unsignalized Intersections

Operations of the unsignalized study intersections (e.g., stop-sign controlled) were evaluated using the methodology contained in Chapter 17 of the 2000 HCM and the SYNCHRO and TRAFFIX analysis software programs. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side street–controlled intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. For all-way stop-controlled locations, a weighted-average delay for the entire intersection is presented. Table 4.11-2 summarizes the relationship between delay and LOS for unsignalized intersections.



Source: Data compiled by Fehr & Peers in 2010

Existing Volumes **Exhibit 4.11-2**

Table 4.11-2 Level of Service Definitions for Stop-Controlled Intersections	
Level of Service	Average Stopped Delay per Vehicle (seconds)
A	≤10.0
B	>10.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	>50.0
Source: Transportation Research Board 2000	

Roadway Segments

Levels of service for the roadway segments were evaluated by comparing the measured average daily traffic (ADT) volume to volume thresholds presented in the City's Circulation Element (City of Paso Robles 2003) and to volume thresholds presented in *Quality/Level of Service Handbook* (Florida Department of Transportation 2002). Table 4.11-3 presents threshold volumes for various roadway types. These threshold volumes include adjustments for divided and undivided facilities and for roadways with left-turn lanes.

Table 4.11-3
Level of Service Definitions for Urban/Suburban Roadways

Roadway Type	Total Daily Vehicles in Both Directions (ADT)				
	LOS A	LOS B	LOS C	LOS D	LOS E
Four-Lane Divided Freeway	28,000	43,200	61,600	74,400	80,000
Six-Lane Divided Arterial (with left-turn lane)	32,000	38,000	43,000	49,000	54,000
Four-Lane Divided Arterial (with left-turn lane)	22,000	25,000	29,000	32,500	36,000
Four-Lane Undivided Arterial (no left-turn lane)	18,000	21,000	24,000	27,000	30,000
Two-Lane Undivided Highway	2,000	7,000	13,800	19,600	27,000
Two-Lane Collector (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
Two-Lane Collector (no left-turn lane)	8,000	9,500	10,500	12,000	13,500

Notes: ADT = average daily traffic; LOS = level of service.
Sources: City of Paso Robles 2003; Florida Department of Transportation 2002:Table 4-1.

This planning-level analysis determines whether the study roadway segments are operating below or over capacity. Because this type of analysis is general in nature and does not take into account delays related to intersection operations and other factors affecting capacity, impacts usually defer to a more detailed operational analysis (intersection LOS).

Parking

The former DJJ facility includes three main parking lots: a 200-space lot along the Airport Road frontage at the southeastern corner of the site, a 17-space lot on the southern property line along Dry Creek Road, and a facility/maintenance yard that includes space for approximately 50 additional vehicles. The CAL FIRE site provides on-site parking in a separate lot on its grounds.

As part of the proposed Master Reuse Plan, parking for the Estrella Facility would be modified to serve the new use. The 200-space lot fronting Airport Road would be reduced to accommodate the new perimeter fence line and modified driveway access. Approximately 50 spaces are proposed to remain with this configuration. The 17-space lot on Dry Creek Road also would be removed with the new perimeter fence. A 350-space employee lot and 35-space visitor lot are planned for the Estrella Facility near the visitor entrance in the southwest quadrant of the site (see Exhibit 3-3). A total of 435 visitor and staff parking spaces would be provided at the Estrella Facility. The CAL FIRE facility would provide 28 parking spaces on the site and the reentry facility would provide 458 parking space on-site.

The parking demand was estimated based on the maximum staffing projections provided by CDCR. The maximum weekday parking demand occurs during the 2 p.m. custodial shift change as this is the time which second watch staff come to the site and first watch staff are still onsite. Custodial staff are required to physically hand off their shift to the next watch. Table 4.11-4 details the estimated parking demand at each shift change for the project components. As shown, the maximum estimated parking demand for the Estrella Facility is 394 spaces. The proposed supply of 350 spaces, plus 50 in the lot

Table 4.11-4
Estimated Maximum Parking Demand

Project Component	Time of Day			
	6 a.m.	8 a.m.	2 p.m.	5 p.m.
Estrella Adult Male Correctional Facility	**202**	**323**	**394**	**227**
Custodial Staff	*202*	*167*	*238*	*71*
Administrative/Ancillary Staff	*0*	*156*	*156*	*156*
Visitors	*0*	*0*	*0*	*0*
Central Coast Regional Secure Community Reentry Facility	**77**	**231**	**268**	**222**
Custodial Staff	62	46	83	37
Administrative/Ancillary Staff	0	170	170	170
Visitor	15	15	15	15
CAL FIRE Conservation Camp	**6**	**16**	**10**	**20**

Note: CAL FIRE = California Department of Forestry and Fire Protection
Source: Fehr & Peers 2010

fronting Airport Road, is adequate to meet the overall site demand. Because adequate parking would be provided on-site to meet projected parking demands, no significant environmental impacts would occur and this issue is not evaluated further in this DEIR.

Level of Service Standards

The City maintains LOS D as the minimum acceptable level of service for intersections (i.e., LOS E and F are considered unacceptable operations). According to the California Department of Transportation's (Caltrans's) *Guide for the Development of Traffic Impact Studies*, Caltrans has more stringent standards than the City and strives to maintain operations at the LOS C/D threshold on state-operated facilities in the study area, which include U.S. 101 and SR 46. Therefore, LOS C or better is considered the minimum acceptable operating level on Caltrans facilities for purposes of this study.

Existing Intersection and Roadway Levels of Service

Table 4.11-5 summarizes the existing delay and LOS at each of the analyzed intersections for the morning and evening peak hours. As indicated in the tables, all of the analyzed intersections currently operate at acceptable level of service, except:

- U.S. 101 Northbound Ramps and SR 46 East (p.m. peak hour),
- Golden Hill Road and SR 46 East (a.m. and p.m. peak hours),
- Union Road and SR 46 East (a.m. and p.m. peak hours),
- Airport Road and SR 46 East (p.m. peak hour),
- Jardine Road and SR 46 East (a.m. and p.m. peak hour), and
- Golden Hill Road and Union Road (a.m. peak hour).

Table 4.11-5
Existing Intersection Peak Hour Levels of Service

Intersection	Traffic Control	Peak Hour[1]	Average Vehicular Delay (sec)[2]	LOS[3]
1. U.S. 101 Southbound Ramps and SR 46 East	Signal	a.m. p.m.	24.0 29.8	C C
2. U.S. 101 Northbound Ramps and SR 46 East	Signal	a.m. p.m.	23.5 **38.4**	C **D**
3. Buena Vista Drive and SR 46 East	Signal	a.m. p.m.	17.9 17.7	B B
4. Golden Hill Road and SR 46 East	Signal	a.m. p.m.	**58.5** **48.9**	**E** **D**
5. Union Road and SR 46 East	Side-Street Stop	a.m. p.m.	**34.4 (NB LT[4])** **37.9 (NB LT[4])**	**D** **E**
6. Airport Road and SR 46 East	Side-Street Stop	a.m. p.m.	18.5 (SB LT[4]) **37.2 (SB LT[4])**	C **E**
7. Jardine Road and SR 46 East	Side-Street Stop	a.m. p.m.	**32.6 (SB LT[4])** **96.0 (SB LT[4])**	**D** **F**
8. Airport Road and Old Dry Creek Road	Side-Street Stop	a.m. p.m.	12.2 (WB LT[4]) 14.8 (WB LT[4])	B B
9. Golden Hill Road and Union Road	All-Way Stop	a.m. p.m.	**63.8** 16.1	**F** C

Notes: SR = State Route; U.S. 101 = U.S. Highway 101. Unacceptable operations highlighted in **bold** text.

[1] a.m. = morning peak hour, p.m. = afternoon peak hour.

[2] Whole-intersection weighted-average control delay expressed in seconds per vehicle using methods described in the *2000 Highway Capacity Manual*. For side-street stop-controlled intersections, total control delay for the worst movement is presented.

[3] LOS = level of service.

[4] NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, LT= left-turn movement, T = through movement, RT = right-turn movement

Source: Data compiled by Fehr & Peers in 2010.

Table 4.11-6 summarizes the existing LOS along the analyzed roadway segments. New Dry Creek Road west of Airport Road was analyzed under future conditions only, as no development has yet been built and/or occupied along its frontage. As indicated in the tables, all of the analyzed roadway segments currently operate at acceptable LOS.

Table 4.11-6 Existing Roadway Segment Levels of Service				
Roadway Segment	Jurisdiction	Roadway Type	Volume[1]	LOS
SR 46 East between U.S. 101 and Buena Vista Drive	Caltrans	Four-Lane Divided Arterial	26,560	C
SR 46 East between Union Road and Airport Road	Caltrans	Four-Lane Divided Arterial	24,820	B
Airport Road, between SR 46 East and Dry Creek Road	City of Paso Robles	Two-Lane Collector[2]	5,350	A
New Dry Creek Road west of Airport Road	City of Paso Robles	*Future study segment only*		

Notes: Caltrans = California Department of Transportation; LOS = level of service; SR = State Route

[1] Average daily traffic. Note volume reported is the maximum volume on the given roadway segment within the study area.

[2] Airport Road is classified as an arterial roadway in the City's 2003 General Plan and Circulation Element. Because no operating standards are presented for a two-lane arterial, two-lane collector thresholds were used on Airport Road. This represents a conservative analysis.

Source: Data compiled by Fehr & Peers in 2010.

4.11.2 REGULATORY BACKGROUND

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to transportation are applicable to the proposed project.

STATE, AND REGIONAL PLANS, POLICIES, REGULATIONS, AND LAWS

Caltrans State Route 46 East Comprehensive Corridor Study

Caltrans recently completed the *State Route 46 East Comprehensive Corridor* Study—an 18-month planning process to review traffic operations, issues, and constraints on SR 46 East between Airport Road and U.S. 101 in Paso Robles. This study included extensive public involvement and outreach efforts to develop strategies for long-term planning along the SR 46 East corridor. The key results of the study highlighted the importance of local roadway connections in addition to SR 46 East and improvements at the Union Road/SR 46 East intersection.

San Luis Obispo Council of Governments Regional Transportation Plan

The San Luis Obispo Council of Governments is the regional planning agency that serves as a forum for transportation planning and area wide issues. The currently adopted regional transportation plan (2005) provides the vision for the transportation system in San Luis Obispo County in 2025. The document defines goals, policies, and actions to develop a transportation system that meets the regional growth needs and supports multimodal travel.

The San Luis Obispo Council of Governments is currently in the process of updating the 2005 regional transportation plan; SLOCOG recently released an Administrative Draft *Regional Transportation Plan-Preliminary Sustainable Community Strategy* (RTP-PSCS) in August 2010. The RTP-PSCS, "delineates a set of regional transportation goals, policies, and actions, intended to guide development of the planned multimodal transportation system in the region and integrate new requirements of state law to address the interrelationship of transportation and land use policies and practices." The RTP-PSCS identifies transportation improvement projects that are identified in the development of mitigation measures later in this document under Section 4.11.4, "Proposed Mitigation Measures."

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of El Paso de Robles General Plan and Circulation Element

The City regulates traffic and circulation through the adoption of policies and programs within the *City of El Paso de Robles General Plan* (City General Plan) and Circulation Element. The City General Plan defines goals, policies, and actions to regulate traffic within Paso Robles. The Circulation Element contains policy statements that serve as a framework for evaluating the effect of proposed projects on the transportation system. Development within Paso Robles would be reviewed for consistency with the City General Plan and Circulation Element. The current Circulation Element was adopted in 2003, and the City is processing an update that will be undergoing environmental review through late 2010.

City of Paso Robles Municipal Code

The City of Paso Robles Municipal Code includes policies regarding the design, maintenance, and operation of the City's circulation system. These regulations are provided under sections on Streets and Sidewalks (Title 11), Vehicles and Traffic (Title 12), and Airports (Title 13). Parking requirements also are identified in the City's Municipal Code.

Traffic Mitigation Fees

The City of Paso Robles collects development impact fees to assist in funding future growth-related improvement projects. The fee program provides a mechanism through which "growth pays for growth" and the City's projected infrastructure and public service needs can be met. The City's fee schedule was adopted in accordance with the Mitigation Fee Act, otherwise referred to as Assembly Bill (AB) 1600. AB 1600 created Section 66000 *et. seq.* of the Government Code and was enacted by the California State legislature in 1987. It allows the City to impose fees as a condition of approval for projects involving the issuance of a permit.

Implementation of the Master Reuse Plan would not require a permit from the City, but an encroachment permit may be required. However, under CEQA the voluntary payment of fees can represent a feasible form of mitigation for the environmental effects of a project. Transportation fees collected under the City's development impact fee program are used to fund needed traffic improvements, and are based on the number of daily traffic trips expected from different land uses. As discussed below, implementation of the Master Reuse Plan would result in several potentially significant traffic impacts within the City's circulation system. Payment of traffic impact fees to the City in order to fund identified traffic improvement projects would mitigate these potentially significant impacts to a less than significant level.

The City's fee schedule establishes trip-based impact fees for residential, commercial, and industrial projects, none of which is entirely similar to a correctional facility. Moreover, in this DEIR the number of traffic trip-ends anticipated from implementation of the Master Reuse Plan has been calculated later in this section at Table 4.11-7 (1,472 with a reentry facility and 884 without a reentry facility). This trip calculation provides the most accurate estimate of the project's impacts and is therefore most appropriate for determining traffic mitigation fees. Applying these numbers to the City's fee structure, CDCR's "fair share" of fees to offset traffic impacts would range from $641,956 (fee for a commercial land use) to $2,899,840 (fee for an industrial land use) with a reentry facility, and from $385,000 to $1,741,480 without a reentry facility. CDCR will work with the City to identify the appropriate fee for a correctional facility.

The City's development impact fee schedule also includes other categories of impact fees. The law relieves state agencies like CDCR from any obligation to pay such local development impact fees, unless on a voluntary basis to offset impacts under CEQA. Here, payment of these fees is unnecessary as they would not be used to mitigate any potentially significant impacts caused by implementation of the Master Reuse Plan.

Similar to the City's transportation impact fee program, Caltrans District 5 works with project proponents to determine a project's fair share of fees needed to offset transportation impacts to state roads and highways. As discussed below, payment of traffic impact fees to Caltrans in order to fund identified traffic improvement projects would be necessary to mitigate these potentially significant impacts. CDCR will work with Caltrans to identify the appropriate fair share contribution toward these enhancements.

4.11.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

This section presents an analysis of the projected baseline (i.e., existing traffic conditions), baseline plus project, cumulative (i.e., cumulative roadway conditions that would occur with buildout of area projects that are anticipated to be completed by 2025), and cumulative plus project traffic volumes to determine the potential impacts of the Master Reuse Plan on existing and cumulative traffic conditions. The analysis of the Master Reuse Plan includes future conditions both with and without the proposed reentry facility.

THRESHOLDS OF SIGNIFICANCE

The levels of significance of project-related impacts on traffic conditions were determined through the application of significance criteria as detailed in the following section. The following significance criteria were selected based on the agency with jurisdiction over the roadways that would receive project-related traffic. The significance criteria have been adopted by the appropriate agencies.

Roadway Network

The roadway network includes signalized and unsignalized intersections, as well as roadway segments, in several jurisdictions. However, no signalized intersections within the Paso Robles city limits are included in this study.

For *signalized Caltrans intersections*, based on Caltrans's *Guide for the Preparation of Traffic Impact Studies*, an impact is considered significant if implementation of the proposed project would do either of the following:

- degrade the level of service from an acceptable level (LOS C or better) to an unacceptable level (LOS D, E, or F); or
- add traffic to those facilities already operating at LOS D, E, or F without the project.

For *unsignalized City of Paso Robles intersections*, an impact is considered significant if implementation of the proposed project would do either of the following:

- cause intersection operations of an all-way stop-controlled intersection or the side-street movement or approach to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F) and satisfy the peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD); or
- exacerbate unacceptable operations (LOS E or F) and satisfy the peak-hour signal warrant from the MUTCD.

For *unsignalized Caltrans intersections*, based on Caltrans's *Guide for the Preparation of Traffic Impact Studies*, an impact is considered significant if implementation of the proposed project would do either of the following:

- cause intersection operations for the side-street movement or approach to deteriorate from an acceptable level (LOS C or better) to an unacceptable level (LOS D, E, or F) and satisfy the peak-hour signal warrant from the MUTCD; or
- exacerbate unacceptable operations (LOS D, E, or F) and satisfy the peak-hour signal warrant from the MUTCD.

For *roadway segments within the City of Paso Robles*, an impact is considered significant if implementation of the proposed project would do either of the following:

- degrade the level of service from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- add project traffic to those facilities already operating at LOS D, E, or F without the project.

For *Caltrans roadway segments*, an impact is considered significant if implementation of the proposed project would do either of the following:

- degrade the level of service from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F), as Caltrans has accepted LOS D operations in other jurisdictions in urban areas; or
- add project traffic to those facilities already operating at LOS D, E, or F without the project.

Transit Impacts

An impact is considered significant if implementation of the proposed project would conflict with existing or planned transit facilities.

Bicycle and Pedestrian Impacts

An impact is considered significant if implementation of the proposed project would conflict with existing or planned bicycle or pedestrian facilities.

Site Access Impacts

An impact is considered significant if implementation of the proposed project would create a substandard level of service or potential safety issue at a site access point under project conditions.

Emergency Access Impacts

An impact is considered significant if implementation of the proposed project would result in inadequate emergency access.

Safety Hazard Impacts Due to a Design Feature

An impact is considered significant if implementation of the proposed project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Air Traffic Safety Hazard Impacts

An impact is considered significant if implementation of the proposed project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in a substantial safety risk.

EXISTING PLUS PROJECT CONDITIONS

To evaluate the potential impacts of the Master Reuse Plan on the local roadway system, the traffic study developed estimates of traffic conditions with the Master Reuse Plan.

Master Reuse Plan–Generated Traffic Volumes

CDCR operates prisons throughout the state and has produced numerous traffic studies. A great number of these studies are based on observations of current operational characteristics at existing state prisons. CDCR and its consultants have considerable experience with how shift change traffic occurs, carpooling characteristics, and the various factors leading to trip generation. For example, for typical correctional operations, there are very few staff that travel off-site for their lunch break due to the custody and security operational requirements. This data was used to establish the traffic operational characteristics of this project. During daily operations, three primary types of activities would generate vehicular trips: employee arrivals and departures, visitation, and delivery/service vehicles. Based on maximum staffing projections provided by CDCR, the number of vehicles and trips to the site were estimated. No carpooling was assumed, which represents a conservative estimate of vehicle trip generation. A 5% reduction in staff was assumed to account for staff persons at off-site meetings, out of the office due to illness or vacation, or otherwise working elsewhere. Table 4.11-7 summarizes the projected trip generation for the Master Reuse Plan for each of these elements during operations.

Table 4.11-7
Estimated Trip Generation at Maximum Capacity

Project Component	Number of People	Number of Vehicles	Daily Trips	Vehicle Trips [a]					
				a.m. Peak Hour			p.m. Peak Hour		
				In	Out	Total	In	Out	Total
Estrella Adult Male Correctional Facility	429	415	830	148	0	148	0	148	148
CAL FIRE Conservation Camp	26	27	54	10	0	10	0	10	10
Central Coast Regional Secure Community Reentry Facility	299	294	588	162	0	162	0	162	162
Total	**754**	**736**	**1,472**	**320**	**0**	**320**	**0**	**320**	**320**

Notes: CAL FIRE = California Department of Forestry and Fire Protection
[a] Trip estimates incorporate all assumptions as described in text.
Source: Data compiled by Fehr & Peers in 2010

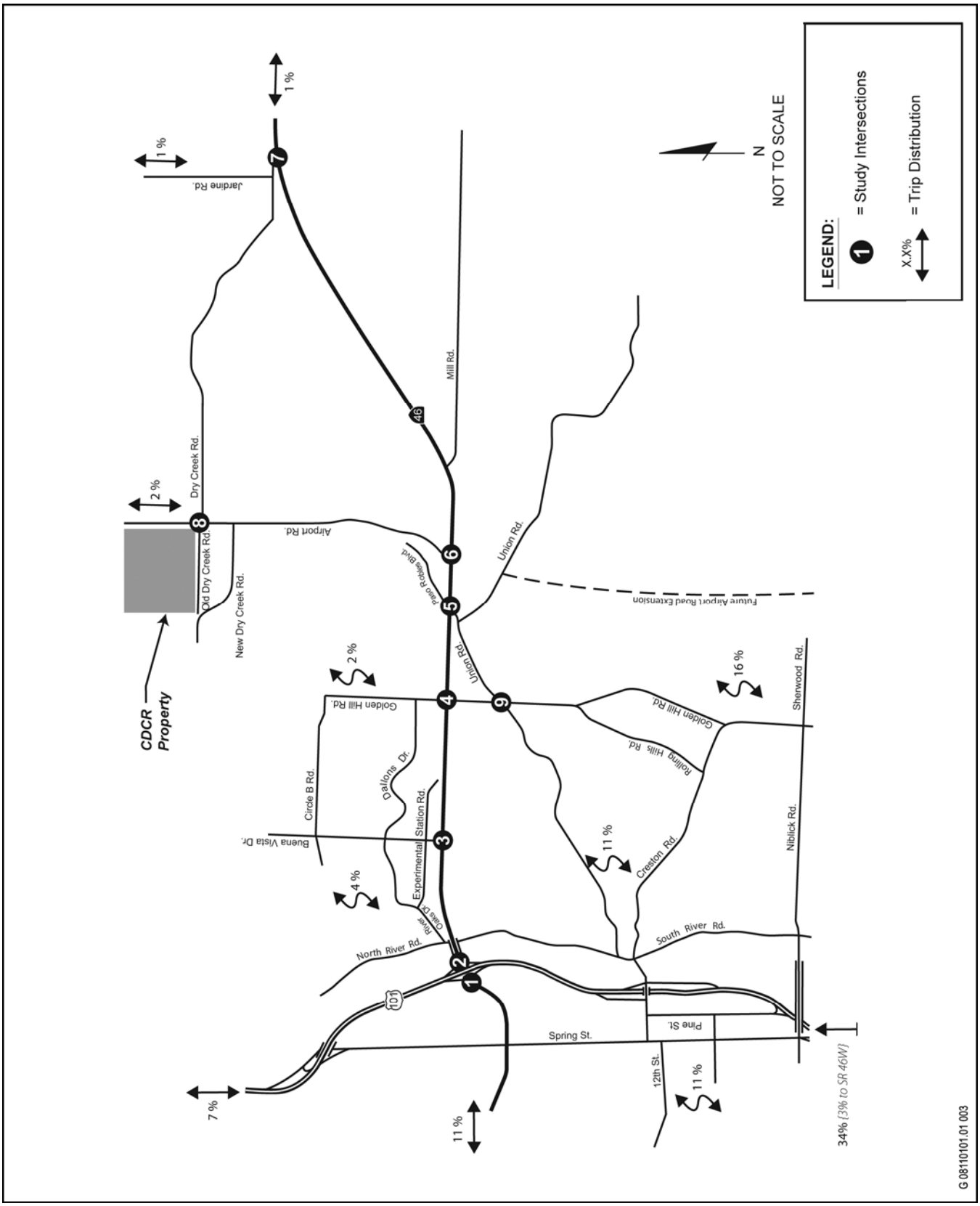
As shown in Table 4.11-7, a total of approximately 1,472 daily vehicle trips would be generated, of which approximately 320 trips are projected for each of the morning and evening peak hours (148 for Estrella, 162 for the reentry facility, and 10 for CAL FIRE).

A traffic distribution pattern was developed for the Master Reuse Plan employee, visitor, delivery and inmate transfer vehicles, based on the predicted geographical distribution of prison employee residences for the former DJJ facility (see Exhibit 4.11-3). Using these data, the directional distribution pattern for employee, visitor, inmate transfer, and delivery trips was estimated.

Trips were assigned to the study intersections and roadways in accordance with the trip distribution percentages and roadway network as shown in Exhibit 4.11-4.

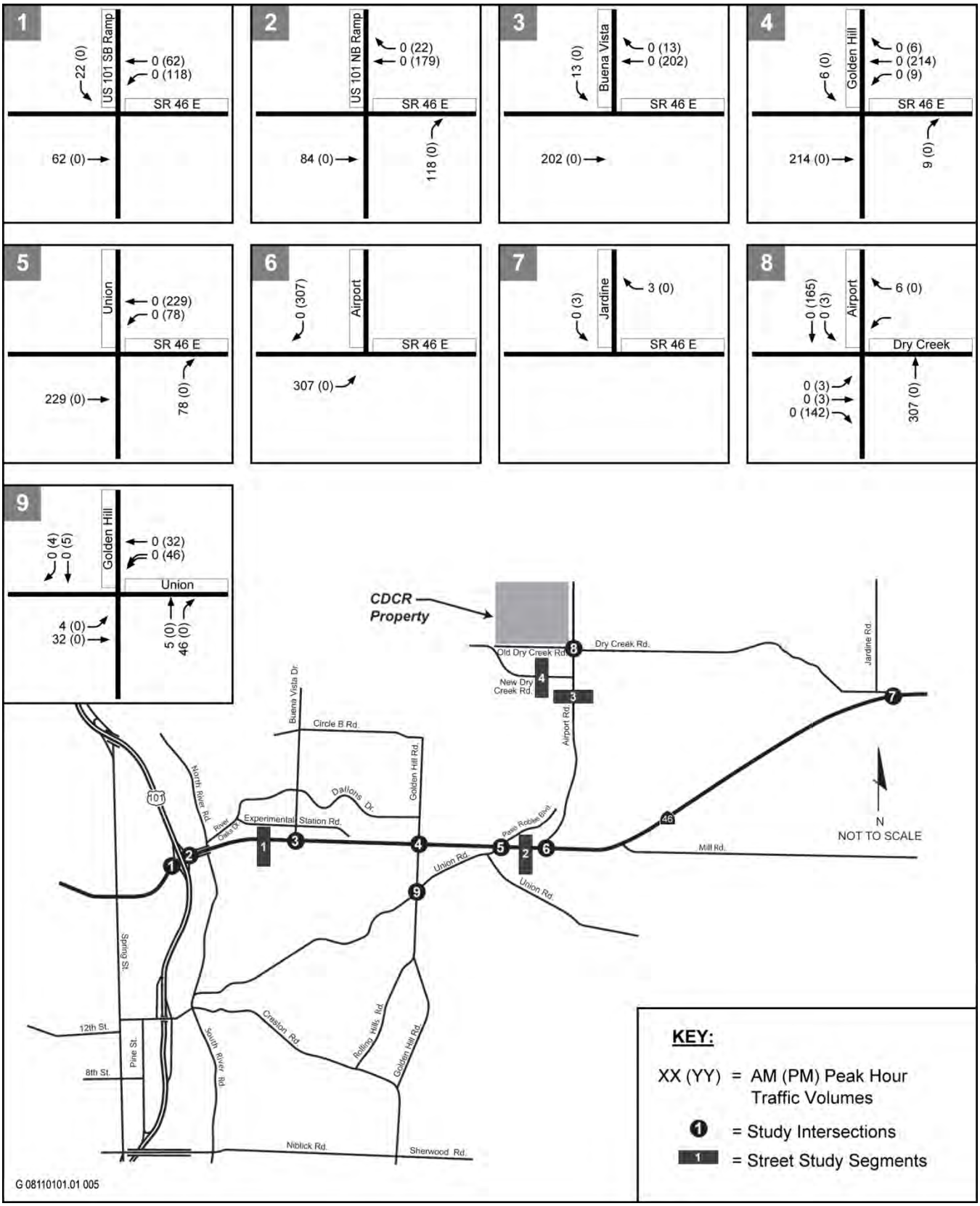
Project Impacts

Intersection operations were projected under Existing plus project conditions to determine the potential impacts of the Master Reuse Plan. Table 4.11-8 summarizes the projected peak hour levels of service at each study intersection. Exhibit 4.11-5 shows the peak hour traffic volumes under existing plus project conditions.



Source: Data compiled by Fehr & Peers in 2010

Proposed Trip Distribution **Exhibit 4.11-3**



Source: Data compiled by Fehr & Peers in 2010

Trip Assignment **Exhibit 4.11-4**

Table 4.11-8
Intersection Peak-Hour Levels of Service

Intersection	Traffic Control	Peak Hour[1]	Existing Conditions		Project Conditions		
			Delay[2]	LOS[3]	Delay[2]	LOS[3]	Percent Project Traffic[4]
1. U.S. 101 Southbound Ramps and SR 46 East	Signal	a.m. p.m.	24.0 29.8	C C	25.2 **46.9**	C **D**	4% 7%
2. U.S. 101 Northbound Ramps and SR 46 East	Signal	a.m. p.m.	23.5 **38.4**	C **D**	**48.2** **43.7**	**D** **D**	**9%** **7%**
3. Buena Vista Drive and SR 46 East	Signal	a.m. p.m.	17.9 17.7	B B	17.2 19.0	B B	- -
4. Golden Hill Road and SR 46 East	Signal	a.m. p.m.	**58.5** **48.9**	**E** **D**	**64.4** **57.3**	**E** **E**	**10%** **9%**
5. Union Road and SR 46 East	Side-Street Stop	a.m. p.m.	**34.4 (NB LT[5])** **37.9 (NB LT[5])**	**D** **E**	**46.5 (NB RT[5])** **77.5 (NB LT[5])**	**E** **F**	**15%** **13%**
6. Airport Road and SR 46 East	Side-Street Stop	a.m. p.m.	18.5 (SB LT[5]) **37.2 (SB LT[5])**	C **E**	**>150 (SB LT[5])** **>150 (SB LT[5])**	**F** **F**	**15%** **13%**
7. Jardine Road and SR 46 East	Side-Street Stop	a.m. p.m.	**32.6 (SB LT[5])** **96.0 (SB LT[5])**	**D** **F**	**32.6 (SB LT[5])** **104.6 (SB LT[5])**	**D[6]** **F[6]**	**-** **-**
8. Airport Road and Dry Creek Road	Side-Street Stop	a.m. p.m.	12.2 (WB LT[5]) 14.8 (WB LT[5])	B B	19.9 (WB LT[5]) **87.4 (WB LT[5])**	C **F[6]**	**41%** **39%**
9. Golden Hill Road and Union Road	All-Way Stop	a.m. p.m.	**63.8** 16.1	**F** C	**70.8** 20.6	**F** C	6% 7%

Notes: SR = State Route; U.S. 101 = U.S. Highway 101. Unacceptable operations noted in **bold** text.

1 a.m. = morning peak hour, p.m. = afternoon peak hour.

2 Whole-intersection weighted-average control delay expressed in seconds per vehicle using methods described in the 2000 *Highway Capacity Manual*. For side-street stop-controlled intersections, total control delay for the worst movement is presented.

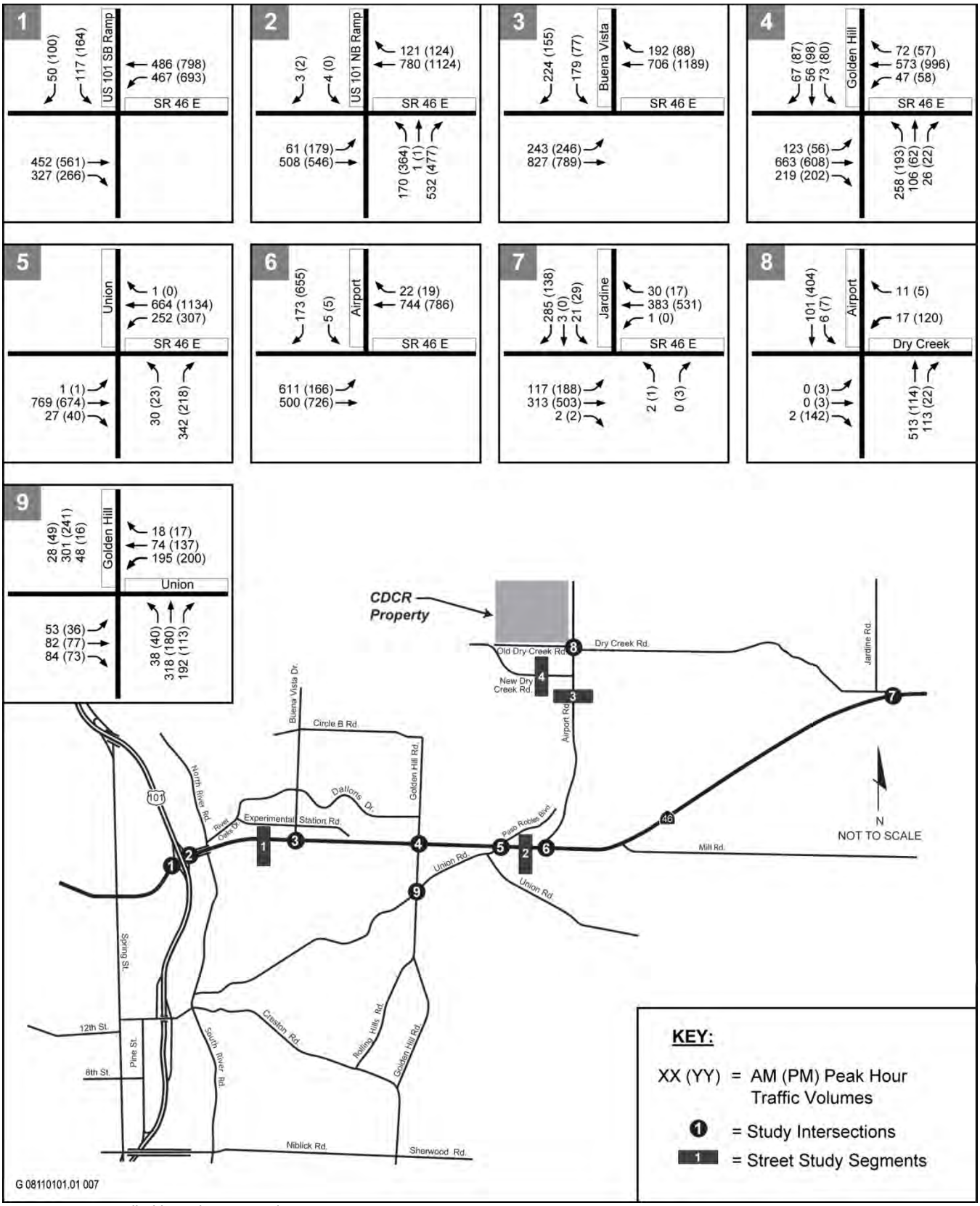
3 LOS = level of service.

4 Percent project traffic is defined as the amount of traffic added to an intersection by the proposed project, divided by the total amount of traffic expected under existing plus project conditions.

5 NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, LT = left-turn movement, T = through movement, RT = right-turn movement

6 Intersection operates unacceptably, but does not meet applicable signal warrant

Source: Data compiled by Fehr & Peers in 2010.



Source: Data compiled by Fehr & Peers in 2010

Peak-Hour Traffic Volumes **Exhibit 4.11-5**

Impact 4.11-1: Impacts on Operations at U.S. 101 Southbound Ramps and SR 46 East Intersection

Under existing conditions, during the a.m. and p.m. peak hours, the U.S. 101 Southbound Ramps and SR 46 East intersection currently operates at an acceptable LOS C. With implementation of the Master Reuse Plan, operations at the intersection would degrade from LOS C to LOS D during the p.m. peak hour.

Implementation of the Master Reuse Plan would result in the unacceptable degradation of intersection operations during the p.m. peak hour at the U.S. 101 Southbound Ramps and SR 46 East intersection, which is below the Caltrans threshold of LOS C. This would be a ***significant*** *impact (Impact 4.11-1).*

Impact 4.11-2: Impacts on Intersection Operations at U.S. 101 Northbound Ramps and SR 46 East Intersection

Under existing conditions, the U.S. 101 Northbound Ramps and SR 46 East intersection currently operates at an acceptable LOS C during the a.m. peak hour but an unacceptable LOS D during the p.m. peak hour. With implementation of the Master Reuse Plan, operations at the intersection would degrade to LOS D under during the a.m. peak hour and would exacerbate unacceptable LOS D conditions during the p.m. peak hour.

Implementation of the Master Reuse Plan would result in the degradation of the U.S. 101 Northbound Ramps and SR 46 East intersection to LOS D during the a.m. peak hour and exacerbation of unacceptable intersection operations during the p.m. peak hour. This would be a ***significant*** *impact (Impact 4.11-2).*

Impact 4.11-3: Impacts on Intersection Operations at Buena Vista Drive and SR 46 East Intersection

Under existing conditions, the Buena Vista Drive and SR 46 East intersection would operate at an acceptable LOS B during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, this intersection would continue to operate at LOS B during the a.m. and p.m. peak hours.

Implementation of the Master Reuse Plan would result in the acceptable operation of the Buena Vista Drive and SR 46 East intersection during a.m. and p.m. peak hours. This would be a ***less-than-significant*** *impact (Impact 4.11-3).*

Impact 4.11-4: Impacts on Intersection Operations at Golden Hill Road and SR 46 East Intersection

Under existing conditions, the Golden Hill Road and SR 46 East intersection operates unacceptably at LOS E during the a.m. peak hour and LOS D during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable operation of the Golden Hill Road and SR 46 East intersection would be exacerbated by project traffic (i.e., result in an increase in delay by 5.9-8.4 seconds) during both the a.m. and p.m. peak hours. The intersection would continue to operate at unacceptable LOS E during the a.m. peak hour, and would degrade to LOS E during the p.m. peak hour.

Implementation of the Master Reuse Plan would result in the exacerbation of unacceptable operation conditions at the Golden Hill Road and SR 46 East intersection during the a.m. and p.m. peak hours. This would be a ***significant*** *impact (Impact 4.11-4).*

Impact 4.11-5: Impacts on Intersection Operations at Union Road and SR 46 East Intersection

Under existing conditions, the Union Road and SR 46 East intersection operates unacceptably at LOS D during the a.m. peak hour and LOS E during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable operation of the Union Road/SR 46 East intersection would be exacerbated by project traffic during both the a.m. and p.m. peak hours. The intersection would further degrade to LOS E during the a.m. peak hour and LOS F during the p.m. peak hour. The traffic volumes also meet the MUTCD peak-hour signal warrant.

Implementation of the Master Reuse Plan would result in the exacerbation and further degradation of unacceptable operating conditions at the Union Road and SR 46 East intersection during the a.m. and p.m. peak hours and the MUTCD peak-hour signal warrant would be met. This would be a ***significant*** *impact (Impact 4.11-5).*

Impact 4.11-6: Impacts on Intersection Operations at Airport Road and SR 46 East Intersection

Under existing conditions, the Airport Road and SR 46 East intersection operates at an acceptable LOS C during the a.m. peak hour and an unacceptable LOS E during the p.m. peak hour. With implementation of the Master Reuse Plan, operation of the Airport Road and SR 46 East intersection would degrade to LOS F during the a.m. and p.m. peak hours. The intersection also meets the MUTCD peak-hour signal warrant.

Implementation of the Master Reuse Plan would result in the degradation of the Airport Road and SR 46 East intersection to unacceptable operating conditions (LOS F) during the a.m. and p.m. peak hours and the MUTCD peak-hour signal warrant would be met. This would be a ***significant*** *impact (Impact 4.11-6).*

Impact 4.11-7: Impacts on Operations at Jardine Road and SR 46 East Intersection

Under existing conditions, the Jardine Road and SR 46 East intersection operates unacceptably at LOS D during the a.m. peak hour and LOS F during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable operations would be exacerbated by project traffic during both the a.m. and p.m. peak hours and would continue to operate at LOS D during the a.m. peak hour and LOS F during the p.m. peak hour. However, this intersection does not meet the MUTCD peak-hour signal warrant criteria, which is the threshold required for a significant impact.

Although implementation of the Master Reuse Plan would exacerbate unacceptable operating conditions of the Jardine Road and SR 46 East intersection, this intersection would not meet the MUTCD peak-hour signal warrant criteria. Therefore, this impact would be ***less than significant*** *based on MUTCD thresholds (Impact 4.11-7).*

Impact 4.11-8: Impacts on Operations at Airport Road and Old Dry Creek Road Intersection

Under existing conditions, the Airport Road and Old Dry Creek Road intersection currently operates acceptably at LOS B during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, this intersection would continue to operate at acceptable LOS C during the a.m. peak hour; however, operations would degrade to LOS F during the p.m. peak hour. This intersection does not meet the MUTCD peak-hour signal warrant.

Although implementation of the with Master Reuse Plan would degrade the Airport Road and Old Dry Creek Road intersection to an unacceptable LOS F during the p.m. peak hour, this intersection would not meet the MUTCD peak-hour signal warrant criteria. Therefore, this impact would be ***less than significant*** *based on MUTCD thresholds (Impact 4.11-8).*

Impact 4.11-9: Impacts on Operations at Golden Hill Road and Union Road Intersection

Under existing conditions the Golden Hill Road and Union Road intersection operates at an unacceptable LOS F during the a.m. peak hour and LOS C during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable operations would be exacerbated by project traffic during the a.m. peak hour. This intersection meets the MUTCD peak-hour signal warrant criteria.

Implementation of the Master Reuse Plan would result in the further exacerbation of unacceptable operating conditions at the Golden Hill Road and Union Road intersection during the a.m. peak hour and the MUTCD peak-hour signal warrant criteria would be met. This would be a ***significant*** *impact (Impact 4.11-9).*

Roadway Segments

Average daily traffic volumes on each study roadway segment were projected under Existing Plus Project Conditions to determine the potential project-specific impacts of the Master Reuse Plan. Table 4.11-9 summarizes the projected daily levels of service on each study segment. Exhibit 4.11-5 shows the average daily traffic volume study locations.

Table 4.11-9
Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Roadway Type	Existing Conditions		Project Conditions	
			Volume[1]	LOS	Volume[1]	LOS
SR 46 East, between U.S. 101 and Buena Vista Drive	Caltrans	Four-Lane Divided Arterial	26,560	C	27,488	C
SR 46 East, between Union Road and Airport Road	Caltrans	Four-Lane Divided Arterial	24,820	B	26,234	C
Airport Road, between SR 46 East and Dry Creek Road	City of Paso Robles	Two-Lane Collector[2]	5,350	A	6,764	A
New Dry Creek Road, west of Airport Road	City of Paso Robles	Cumulative Conditions Only				

Notes: Caltrans = California Department of Transportation; LOS = level of service; SR = State Route; U.S. 101 = U.S. Highway 101

[1] Average daily traffic. Note volume reported is the maximum volume on the given roadway segment within the project study area.

[2] Airport Road is classified as an arterial roadway in the City of Paso Robles's 2003 General Plan and Circulation Element. Because no operating standards are presented for a two-lane arterial, two-lane collector thresholds were used on Airport Road. This represents a conservative analysis.

Source: Data compiled by Fehr & Peers in 2010

Impact 4.11-10: Impacts on Roadway Segments

Under existing conditions, all study area roadway segments would operate at acceptable LOS based on adopted criteria. With implementation of the Master Reuse Plan, all study area roadway segments would continue to operate at acceptable LOS.

Implementation of the Master Reuse Plan would result in the continued acceptable operation of all study area roadway segments. This would be a ***less-than-significant*** *impact (Impact 4.11-10).*

Transit Impacts

Impact 4.11-11: Public Transit Impacts

Implementation of the Master Reuse Plan would generate demand for public transit services. Based on employee zip code data used to develop the project trip distribution, approximately 50% of the proposed employees are expected to live within the city of Paso Robles; most of these trips would be less than 5 miles in length. Although existing transit service is provided regionally in San Luis Obispo County and locally within the city, no public transit service exists or is planned along Airport Road to serve the CDCR property.

The City has not planned for any transit facilities along Airport Road; therefore, implementation of the Master Reuse Plan would not conflict with any existing or planned transit facilities.

Although implementation of the Master Reuse Plan would generate demand for public transit services, no transit service is proposed to serve the site. Therefore, the Master Reuse Plan would not conflict with any existing or planned transit facilities. This impact would be ***less than significant*** *(Impact 4.11-11).*

Bicycle and Pedestrian Facility Impacts

Impact 4.11-12: Impacts on Bicycle and Pedestrian Facilities

Implementation of the Master Reuse Plan could generate some demand for bicycle facilities. Given the rural nature of the site and surroundings, the Master Reuse Plan is anticipated to generate minimal pedestrian demand. Based on employee zip code data used to develop the project trip distribution, approximately 50% of the proposed employees are expected to live within the city of Paso Robles; most bicycle trips would range from 1.5 miles to more than 5 miles in length. However, current bike access to Airport Road from the remainder of the city is limited and involves use of the highly traveled SR 46 and travel through the unsignalized Airport Road and SR 46 East intersection. No dedicated bike lanes are available. Until improved connectivity is provided across Huerhero Creek, bicycle demand to and from the CDCR property would be limited.

Existing bicycle facilities are provided in the downtown area and in established neighborhoods within Paso Robles. However, no existing bicycle facilities are provided in the vicinity of the CDCR property. According to the City's *Bicycle Master Plan* (2009), Class II bicycle lanes are planned along Airport Road, New Dry Creek Road, and the future connection to Union Road and Golden Hill Road. These facilities would provide a more direct means for bicyclists to access the CDCR property, and the City's impact fee program for residential development includes bicycle facility construction to aid in funding these improvements.

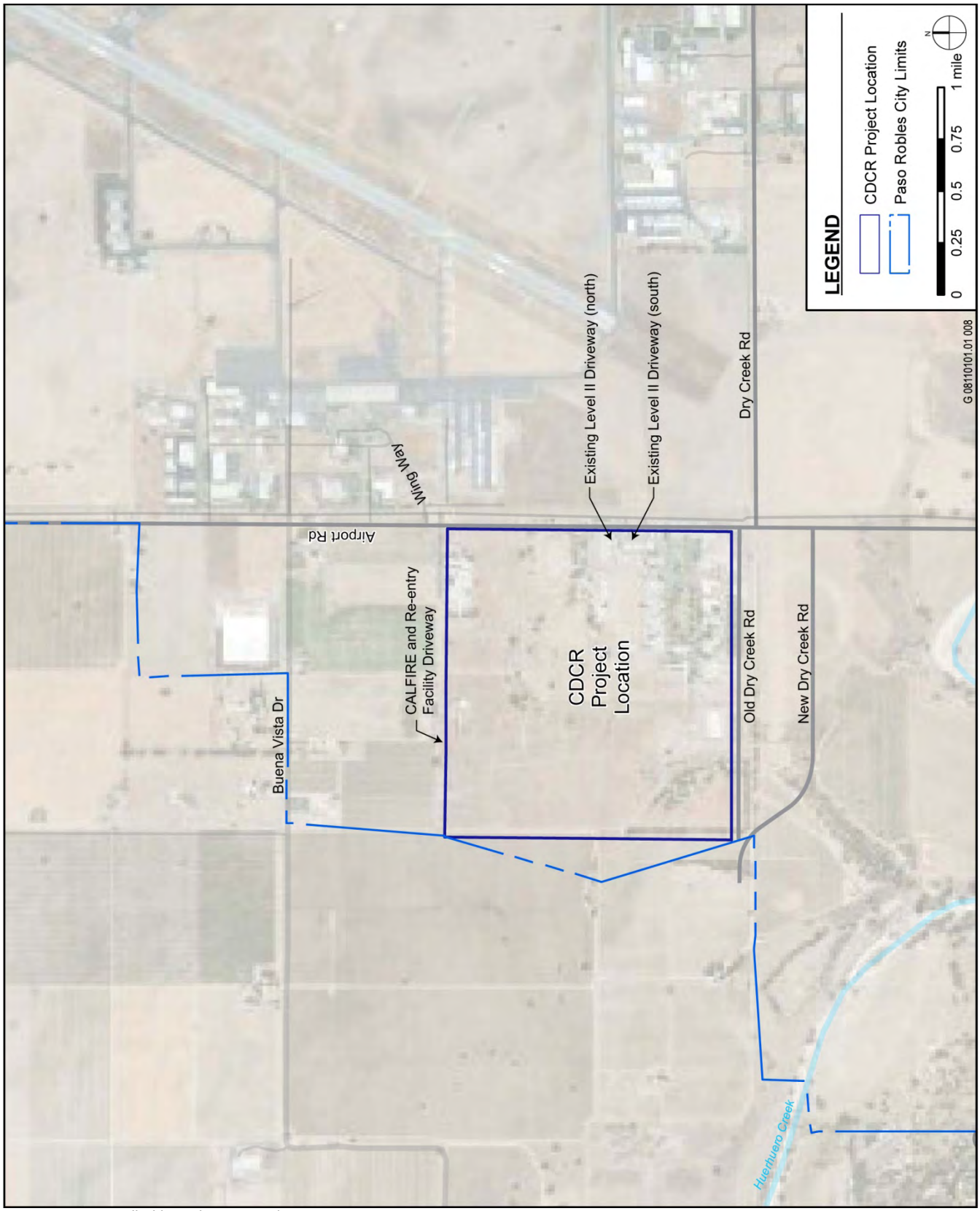
Although improvements to the fencing along Airport Road for the Estrella Facility are proposed, these improvements would not encroach into City right-of-way and would be entirely with the CDCR property. To accommodate appropriate Class II bike lanes on Airport Road, the roadway would need to include 12-foot travel lanes and minimum 6-foot (and preferably 8-foot) shoulders. Adequate right-of-way is available for the City's future planned bike lanes. Overall, implementation of the project would not conflict with any existing or planned bicycle or pedestrian facilities.

Although implementation of the Master Reuse Plan would generate limited demand for bicycle and pedestrian facilities, the site is in a remote location where pedestrian access is limited, no bicycle facilities are provided near the site, and bicycle access from most of the city is difficult because of existing limited connectivity. Bicycle lanes are planned along Airport Road, Dry Creek Road, and the future connections to Union and Golden Hill Roads and implementation of the Master Reuse Plan would not interfere with implementation of these facilities. Because the Master Reuse Plan would generate only limited demand for pedestrian facilities because of its remote location and would not preclude the future implementation of planned bicycle facilities, this impact would be ***less than significant*** *(Impact 4.11-12).*

Site Access Impacts

The primary existing site access roadway to the CDCR property—the old alignment of Dry Creek Road—extends along the property's southern boundary on the west side of Airport Road, and terminates before Huerhuero Creek. The site has used this access throughout the operating history of the facility. The City has recently constructed the alignment of New Dry Creek Road to provide access to parcels west of Airport Road, located approximately 250 feet south of the CDCR property. This new alignment of Dry Creek Road provides access to the planned Winery Row Paso, and is planned for future extension over Huerhuero Creek. The east leg of Dry Creek Road, which connects to Jardine Road and SR 46 East, is offset 50 feet south of Old Dry Creek Road, and roughly 200 feet north of the new alignment.

The Estrella Facility (see Exhibit 3-3) existing site access driveways are presented in Exhibit 4.11-6. Two main access points are proposed to serve the CDCR property. The main access/egress point for the Estrella Facility is located at Airport Road and Old Dry Creek Road. This intersection is proposed to serve outbound traffic from the



Source: Data compiled by Fehr & Peers in 2010

Site Driveway Locations **Exhibit 4.11-6**

Estrella Facility. Inbound traffic would travel north of this intersection on Airport Road, and turn left into the proposed parking lot along the Airport Road frontage. Initially, CDCR proposed to use Old Dry Creek Road at Airport Road as its ingress and egress access point for the proposed Estrella Facility. However, based upon discussion with City staff and concerns raised about potential turning movement conflicts with the offset east leg of Dry Creek Road and New Dry Creek Road, CDCR agreed to modify its proposed site access plan to the plan described above (i.e., outbound only at Old Dry Creek Road and inbound to the parking lot driveway north of Old Dry Creek Road).

The main access/egress point for the reentry and CAL FIRE facilities is located at the northern property boundary. Wing Way, which provides access to the Paso Robles Municipal Airport on the east side of Airport Road, is located approximately 170 feet north of the planned CAL FIRE/reentry facility access driveway. Improvements are planned to enhance the northern driveway, including a northbound left-turn lane and acceleration/deceleration lanes. Exhibit 4.11-7 presents the proposed northern driveway improvements included as part of the Master Reuse Plan.

Impact 4.11-13: Site Access Impacts

Implementation of the Master Reuse Plan would add vehicle traffic to the Airport Road and Dry Creek Road intersection, degrading the level of service to LOS F during the p.m. peak hour. The close spacing of the three Dry Creek Road T-intersections creates turning movement conflicts. LOS F represents the operating level of the left-turn movement from westbound Dry Creek Road to southbound Airport Road. Vehicle queues on Airport Road are not expected to spill back between the west leg of Old Dry Creek Road, the east leg of Dry Creek Road, and the west leg of New Dry Creek Road. Therefore no queuing-related impacts would occur on Airport Road. However, queuing would occur on the westbound approach of Dry Creek Road.

Implementation of the Master Reuse Plan would generate vehicular traffic that would cause an operational deficiency according to City standards at the Airport Road and Dry Creek Road intersection. This deficiency would occur on the western approach of Dry Creek Road for vehicles trying to make a left (southbound) turn onto Airport Road. This would be a ***significant*** *impact (Impact 4.11-13).*

Impact 4.11-14: Emergency Access Impacts

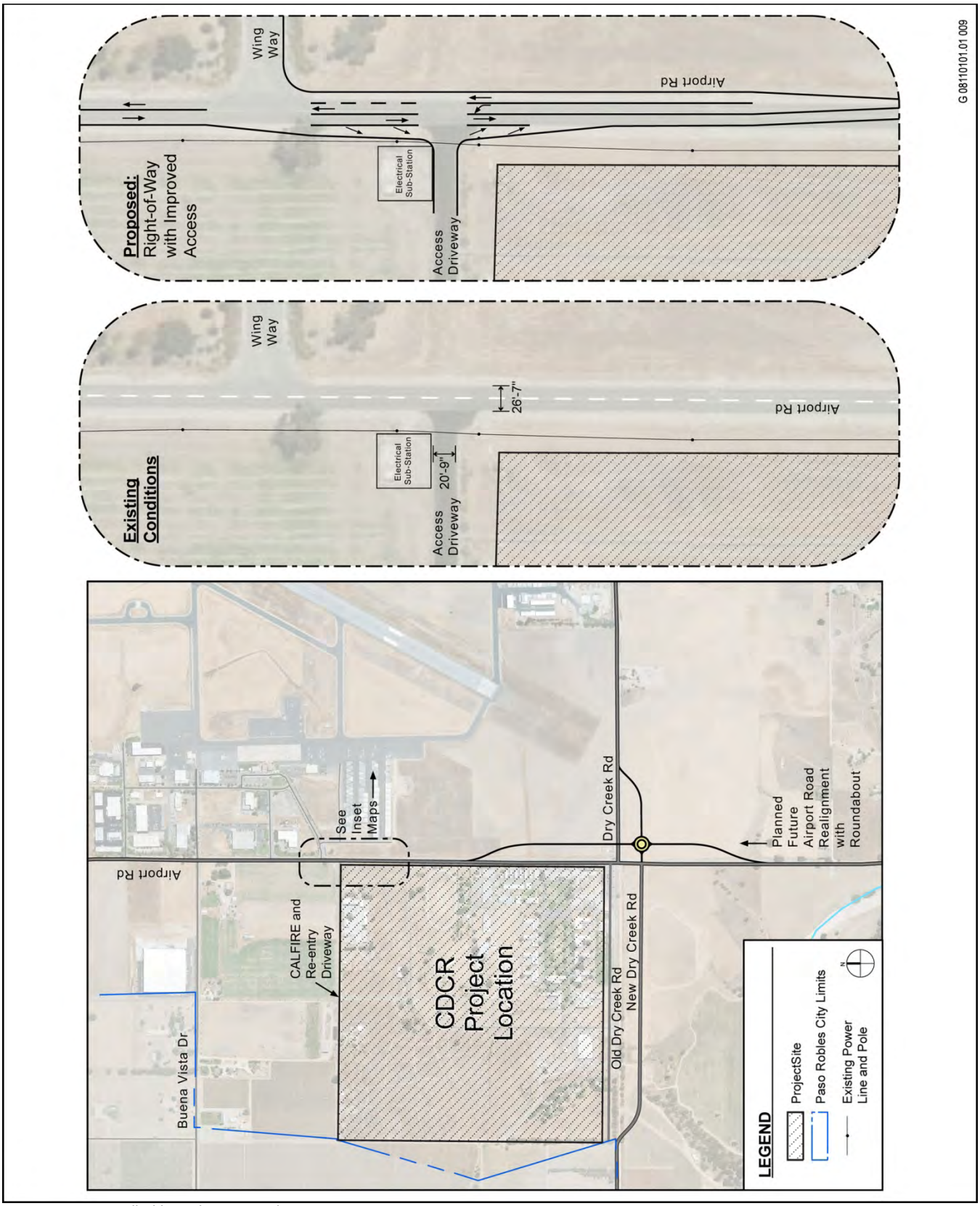
Emergency vehicle access would be provided via the main site entry point at Old Dry Creek Road and at the driveway along the CDCR property's northern boundary. Both of these access points can accommodate large emergency vehicles (i.e., fire trucks) and would provide adequate turning radii. CDCR has proposed improving the northern driveway (i.e., widening this roadway to provide adequate emergency access as shown in Exhibit 4.11-7). With these improvements, large emergency vehicles would be able to access the site in an emergency.

With implementation of the Master Reuse Plan, adequate emergency vehicle access would be provided via two access points to the CDCR property. These access driveways and roadways would be designed to accommodate large emergency vehicles in the event of an emergency. Therefore, this impact would be ***less than significant*** *(Impact 4.11-14).*

Impact 4.11-15: Safety Hazard Impacts Due to a Design Feature

Implementation of the Master Reuse Plan would enhance existing driveways to provide access to the site. These enhanced driveways would not include any sharp curves, and would provide roadway improvements such as left-turn pockets, acceleration/deceleration lanes, and center acceleration lanes to reduce turn movement conflicts and vehicle speeds when maneuvering through the intersections. Therefore, implementation of the Master Reuse Plan would not result in hazardous design features.

Implementation of the Master Reuse Plan would not result in the construction or modification of any hazardous design features. Therefore, this impact would be ***less than significant*** *(Impact 4.11-15).*



Source: Data compiled by Fehr & Peers in 2010

Proposed North Driveway Improvements **Exhibit 4.11-7**

Impact 4.11-16: Air Traffic Safety Hazards

The Paso Robles Municipal Airport is located northeast of the site, across Airport Road. CDCR has initiated coordination with the airport staff to ensure that the design of the proposed facilities not interfere with air traffic or create significant air traffic safety hazards. This impact is fully addressed in Impact 4.6-1 in Section 4.6, "Hazards and Hazardous Materials."

Implementation of the Master Reuse Plan would not result in a change in air traffic patterns, and the impact would be ***less than significant*** *(Impact 4.11-16).*

Impact 4.11-17: Construction-Related Traffic Impacts

Construction activity associated with the Master Reuse Plan could affect parking conditions near and on the CDCR property. During the construction phases, traffic generated by the Master Reuse Plan would be attributable to trucks and construction workers' trips to and from the site. The following provides the construction schedule for each component:

- The Estrella Facility construction is anticipated to begin in mid-2011 and end by the end of 2012.
- The CAL FIRE component is anticipated to begin in early 2011 and end by early 2013.
- The reentry facility construction is anticipated to begin in early 2011 and end in mid-2013.

Security protocols, tool controls, and access requirements would be established and implemented to frame the operations of construction activities. During construction, the estimated peak level of construction workers on-site at any given time would be 375 (a maximum of 200 workers for the Estrella Facility component, 50 workers for the CAL FIRE Conservation Camp component, and 125 workers for the reentry facility component). Construction shifts would generally be between 6 a.m. and 4 p.m.; however, noise-generating construction activities would occur between the hours of 7 a.m. and 7 p.m. Monday through Friday. The number of construction vehicles accessing the site was estimated to be 20 trucks per day. Table 4.11-10 summarizes the estimated daily construction traffic that would access the site.

Table 4.11-10
Estimated Construction Trip Generation

Project Component	Number of Workers	Number of Trucks	Daily Trips
Estrella Adult Male Correctional	200	10	420
Central Coast Regional Secure Community Reentry Facility	125	7	262
CAL FIRE Conservation Camp	50	3	106
Total	**375**	**20**	**788**

Notes: CAL FIRE = California Department of Forestry and Fire Protection. Estimate of construction workers present on-site provided by the California Department of Corrections and Rehabilitation. Estimate of truck trips assumed at a rate of 1 truck per 20 workers per day.
Source: Fehr & Peers 2010

Implementation of the Master Reuse Plan would generate an estimated 788 daily trips. These trips, when added to the local roadway network, could result in many of the same traffic impacts described for the Master Reuse Plan. Without mitigation recommended above for project-related traffic impacts, construction-related traffic could result in significant interim traffic impacts on local roadways. One mitigation measure recommended for specific traffic impacts identified above has been implemented or would be implemented before peak construction activities at the CDCR property: Mitigation at Gold Hill Road and SR 46 East intersection (Mitigation Measure 4.11-4). If this improvement were to be implemented, then traffic impacts associated with these measures would

be improved. However, because the specific timing and phasing of construction is not known at this time, for purposes of CEQA, the Master Reuse Plan construction-related traffic impacts would be potentially significant.

With implementation of the Master Reuse Plan, construction traffic could result in significant interim traffic impact on local roadways. Therefore, this impact would be ***potentially significant*** *(Impact 4.11-17).*

CUMULATIVE (2025) CONDITIONS

Long-term cumulative conditions are assumed to represent Year 2025 conditions. Traffic operations for the Master Reuse Plan are presented below.

Cumulative Roadway Network

The following improvements including those identified in the City's Circulation Element (2003) and SLOCOG's Administrative Draft *Regional Transportation Plan – Preliminary Sustainable Community Strategy (RTP-PSCS)* were assumed to be in place at the time the project is built out. Therefore, these traffic improvements were included in the cumulative no project scenario.

- addition of a second westbound left-turn lane at U.S. 101 Southbound Ramps and SR 46 East, and restriping the eastbound approach to two through lanes and one shared through-right turn lane;
- addition of third and fourth westbound through lanes at U.S. 101 Northbound Ramps and SR 46 East;
- widening of the SR 46 and Golden Hill Road intersection[1];
- widening of SR 46 East to four lanes east of Airport Road and acceleration/deceleration lanes (at Airport Road, Mill Road, and Jardine Road);
- roundabout at Golden Hill Road and Union Road; and
- construction of a new segment of Airport Road south from Union Road to provide direct access to the Chandler Ranch project. The Airport Road and SR 46 East intersection was assumed to remain unsignalized.

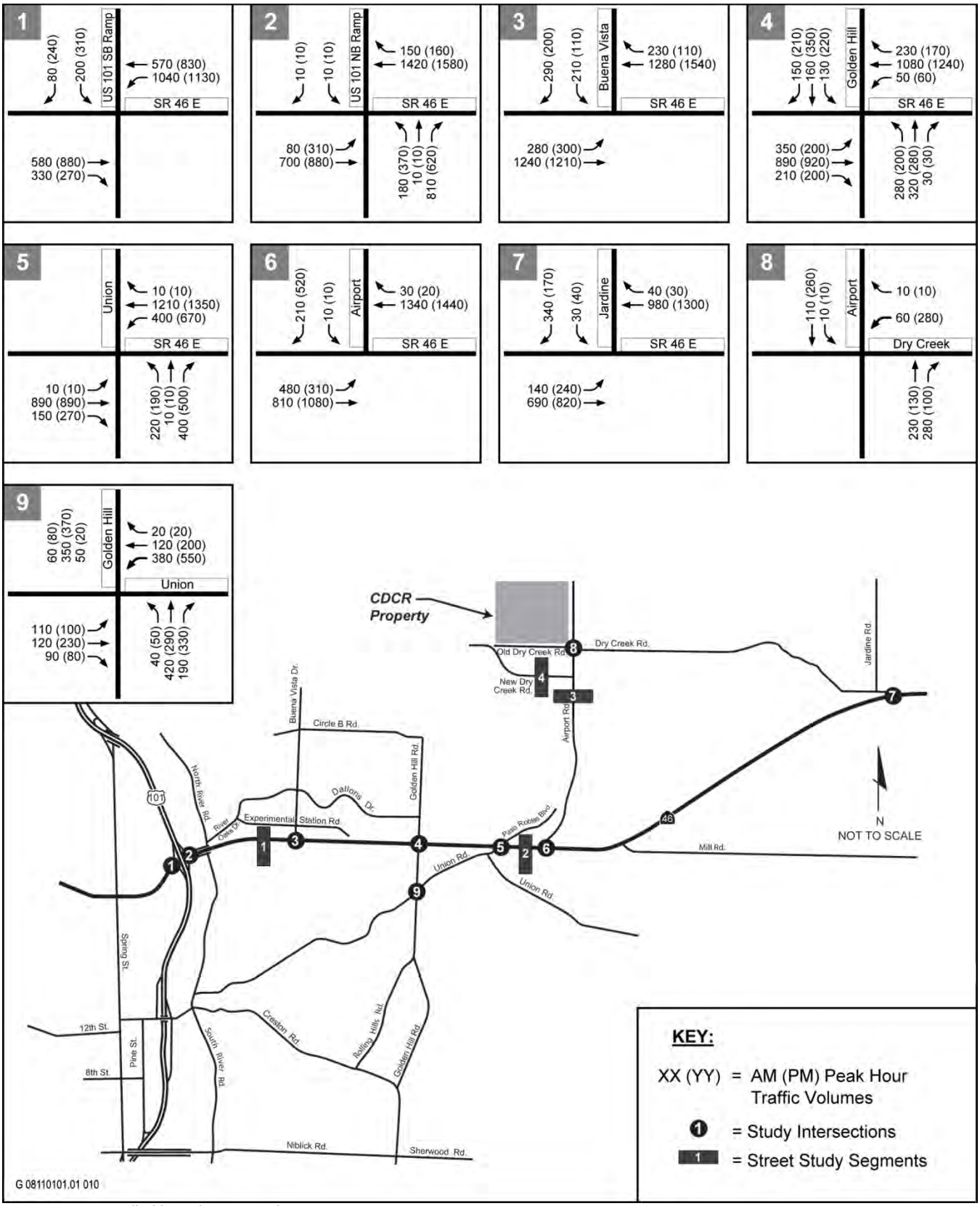
Cumulative Traffic Projections

Traffic forecasts representing the Year 2025 were developed using the City's recently updated Travel Demand Forecasting Model. Improvements from the City's Circulation Element (2003) as listed above were included in the model network. Future year land uses for Year 2025 were developed by the City of Paso Robles.

Traffic forecasts were developed using the difference method—the difference between the future year (Year 2025) and base year (2007) model volumes were calculated and added to existing traffic counts. Exhibit 4.11-8 presents the Cumulative (Year 2025) No Project Traffic volumes.

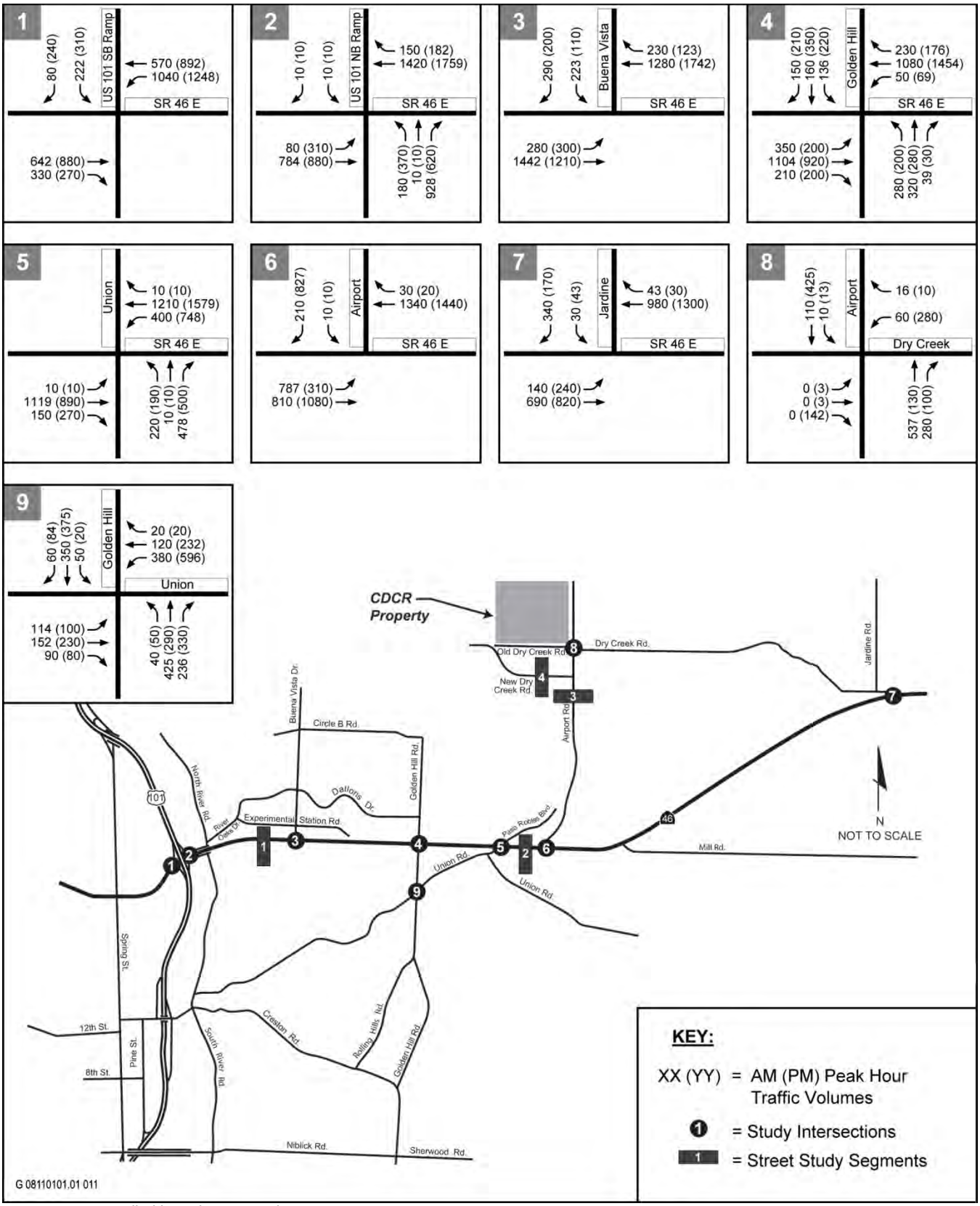
Cumulative Plus Project traffic volumes were developed by adding the project traffic, including the traffic volumes generated by the Master Reuse Plan facilities, to the Cumulative (Year 2025) No Project volumes, using the process described in the Existing Plus Project section. The project trips were assigned to the roadway network based on the directions of approach and departure presented on Exhibit 4.11-3. Daily project trips were added to the existing ADT for each of the study roadway segments. Traffic volumes with the project are presented in Exhibit 4.11-9.

[1] This improvement has already been constructed, but became fully operational after traffic data was collected.



Source: Data compiled by Fehr & Peers in 2010

Cumulative No Project Volumes **Exhibit 4.11-8**



Source: Data compiled by Fehr & Peers in 2010

Cumulative Plus Project Traffic Volumes **Exhibit 4.11-9**

Cumulative (2025) Plus Project Traffic Impacts

Table 4.11-11 presents an analysis of the projected Cumulative (2025) Plus Project traffic volumes to determine the potential cumulative impacts of the proposed project.

Cumulative Intersection Impacts

Impact 4.11-18: Cumulative Impacts on Operation at the U.S. 101 Southbound Ramps and SR 46 East Intersection

Under cumulative no project conditions, the U.S. 101 Southbound Ramps and SR 46 East intersection operates unacceptably at LOS D during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable intersection operations would be exacerbated and this intersection would continue to operate at LOS D during the p.m. peak hour.

*With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS D operations at the U.S. 101 Southbound Ramps and SR 46 East intersection during the p.m. peak hour. This would be a **significant** cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-18).*

Impact 4.11-19: Cumulative Impacts on Operations at U.S. 101 Northbound Ramps and SR 46 East Intersection

Under cumulative no project conditions, the U.S. 101 Northbound Ramps and SR 46 East intersection would operate unacceptably at LOS E during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, unacceptable intersection operations would degrade and this intersection would operate at LOS F during the a.m. and p.m. peak hours.

*With implementation of the Master Reuse Plan, cumulative traffic would cause the U.S. 101 Southbound Ramps and SR 46 East intersection to operate at LOS F during the a.m. and p.m. peak hours. This would be a **significant** cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-19).*

Impact 4.11-20: Cumulative Impacts on Operations at Buena Vista Drive and SR 46 East Intersection

Under cumulative no project conditions, the Buena Vista Drive and SR 46 East intersection would operate acceptably at LOS C during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, this intersection would continue to operate acceptably at LOS C during the a.m. and p.m. peak hours.

*With implementation of the Master Reuse Plan, the Buena Vista Drive and SR 46 East intersection would operate acceptably during the a.m. and p.m. peak hours. This would be a **less-than-significant** cumulative impact (Impact 4.11-20).*

Impact 4.11-21: Cumulative Impacts on Operations at Golden Hill Road and SR 46 East Intersection

Under cumulative no project conditions, the Golden Hill Road and SR 46 East intersection would operate unacceptably at LOS D during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, unacceptable intersection operations would be exacerbated during the a.m. peak hour and would degrade to LOS E during the p.m. peak hour.

*With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS D operations during the a.m. peak hour at the Golden Hill Road and SR 46 East intersection and would degrade operations to LOS E during the p.m. peak hour. This would be a **significant** cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-21).*

Impact 4.11-22: Cumulative Impacts on Operation at Union Road and SR 46 East

Under cumulative no project conditions, the Union Road and SR 46 East intersection would operate unacceptably at LOS F during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, unacceptable intersection operations would be exacerbated during the a.m. and p.m. peak hours.

Table 4.11-11 Cumulative Conditions Intersection Peak-Hour Levels of Service							
Intersection	Traffic Control	Peak Hour[1]	Cumulative Conditions		Cumulative Project		
			Delay[2]	LOS[3]	Delay[2]	LOS[3]	Percent Contribution[4]
1. U.S. 101 Southbound Ramps and SR 46 East	Signal	a.m. p.m.	25.4 **42.8**	C **D**	27.3 **54.7**	C **D**	8% 12%
2. U.S. 101 Northbound Ramps and SR 46 East	Signal	a.m. p.m.	**70.1** **69.2**	**E** **E**	**98.3** **91.7**	**F** **F**	13% 13%
3. Buena Vista Drive and SR 46 East	Signal	a.m. p.m.	23.2 24.1	C C	22.7 30.7	C C	- -
4. Golden Hill Road and SR 46 East	Signal	a.m. p.m.	**37.3** **42.6**	**D** **D**	**37.5** **58.0**	**D** **E**	11% 11%
5. Union Road and SR 46 East	Side-Street Stop	a.m. p.m.	**>150 (NB LT[5])** **>150 (NB LT[5])**	**F** **F**	**>150 (NB LT[5])** **>150 (NB LT[5])**	**F** **F**	17% 15%
6. Airport Road and SR 46 East	Side-Street Stop	a.m. p.m.	**>150 (SB LT[5])** **>150 (SB LT[5])**	**F** **F**	**>150 (SB LT[5])** **>150 (SB LT[5])**	**F** **F**	21% 19%
7. Jardine Road and SR 46 East	Side-Street Stop	a.m. p.m.	**28.8 (SB RT[5])** **71.6 (SB LT[5])**	**D** **F**	**28.8 (SB RT[5])** **75.1 (SB LT[5])**	**D[6]** **F[6]**	- -
8. Airport Road and Dry Creek Road	Side-Street Stop	a.m. p.m.	13.9 (WB LT[5]) 23.7 (WB LT[5])	B C	24.4 (WB LT[5]) **>150 (WB LT[5])**	C **F[6]**	- -
9. Golden Hill Road and Union Road	Round-about	a.m. p.m.	17 27	C D	19 **36**	C **E**	13% 7%

Notes: SR = State Route; U.S. 101 = U.S. Highway 101. Unacceptable operations highlighted in **bold** text. Significant project impacts highlighted with gray shading.

[1] a.m. = morning peak hour, p.m. = afternoon peak hour.

[2] Whole-intersection weighted-average control delay expressed in seconds per vehicle using methods described in the 2000 *Highway Capacity Manual*. For side-street stop controlled intersections, total control delay for the worst movement is presented.

[3] LOS = level of service.

[4] Percent contribution is defined as the amount of traffic added to an intersection by the proposed project, divided by the total volume of traffic growth estimated between existing and cumulative plus project conditions.

[5] NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, LT = left-turn movement, T = through movement, RT = right-turn movement

[6] Intersection operates unacceptably, but does not meet applicable signal warrant

Source: Data compiled by Fehr & Peers in 2010.

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the a.m. and p.m. peak hours at the Union Road and SR 46 East intersection. This would be a ***significant*** *cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-22).*

Impact 4.11-23: Cumulative Impacts on Operations at Airport Road and SR 46 East Intersection

Under cumulative no project conditions, the Airport Road and SR 46 East intersection would operate unacceptably at LOS F during the a.m. and p.m. peak hours. With implementation of the Master Reuse Plan, unacceptable intersection operations would be exacerbated during the a.m. and p.m. peak hours.

*With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the a.m. and p.m. peak hours at the Airport Road and SR 46 East intersection. This would be a **significant** cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-23).*

Impact 4.11-24: Cumulative Impacts on Operations at Jardine Road and SR 46 East Intersection

Under cumulative no project conditions, the Jardine Road and SR 46 East intersection would operate unacceptably at LOS D during the a.m. peak hour and LOS F during the p.m. peak hour. With implementation of the Master Reuse Plan, unacceptable intersection operations would be exacerbated during the a.m. and p.m. peak hours. This intersection does not meet the MUTCD peak-hour signal warrant.

*While implementation of the Master Reuse Plan would exacerbate unacceptable operations during the a.m. and p.m. peak hours at the Jardine Road and SR 46 East intersection, the peak-hour signal warrant is not met. This would be a **less-than-significant** cumulative impact (Impact 4.11-24).*

Impact 4.11-25: Cumulative Impacts on Operations at Airport Road and Dry Creek Road Intersection

Under cumulative no project conditions, the Airport Road/Dry Creek Road intersection would operate at acceptable LOS B during the a.m. peak hour and LOS C during the p.m. peak hour. With implementation of the Master Reuse Plan, intersection operations would degrade to LOS F during the p.m. peak hour. This intersection does not meet the MUTCD peak-hour signal warrant.

*Although implementation of the Master Reuse Plan would degrade operation of the Airport Road and Dry Creek Road intersection to below the City's threshold of LOS D, the peak-hour signal warrant is not met. Therefore, this would be a **less-than-significant** cumulative impact (Impact 4.11-25).*

Impact 4.11-26: Cumulative Impacts on Operations at Golden Hill Road and Union Road Intersection

Under cumulative no project conditions, the Golden Hill Road and Union Road intersection would operate at acceptable LOS C during the a.m. peak hour and LOS D during the p.m. peak hour. With implementation of the Master Reuse Plan, the intersection would continue to operate at LOS C during the a.m. peak hour and LOS E during the p.m. peak hour.

*With implementation of the Master Reuse Plan, the Golden Hill Road and Union Road intersection would degrade to LOS E during the p.m. peak hour. This would be a **significant** cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-26).*

Cumulative Roadway Segment Impacts

Table 4.11-12 summarizes the projected daily levels of service along the analyzed roadway segments under cumulative no project and cumulative plus project conditions.

Impact 4.11-27: Cumulative Impacts on Roadway Segments

Under cumulative no project conditions, the SR 46 East segment between U.S. 101 and Buena Vista Drive and the SR 46 East segment between Union Road and Airport Road would operate unacceptably at LOS F. All other study area roadway segments would operate acceptably. Implementation of the Master Reuse Plan would exacerbate unacceptable operating conditions at the SR 46 East segment between U.S. 101 and Buena Vista Drive and the SR 46 East segment between Union Road and Airport Road. All other study area roadway segments would operate acceptably with implementation of the Master Reuse Plan.

Table 4.11-12 Cumulative Conditions—Roadway Segment Levels of Service						
Roadway Segment	Jurisdiction	Roadway Type	Cumulative Conditions		Cumulative Project	
			Volume[1]	LOS	Volume[1]	LOS
SR 46 East, between U.S. 101 and Buena Vista Drive	Caltrans	Four-Lane Divided Arterial	**41,365**	**F**	**42,295**	**F**
SR 46 East, between Union Road and Airport Road	Caltrans	Four-Lane Divided Arterial	**41,270**	**F**	**42,680**	**F**
Airport Road, between SR 46 East and Dry Creek Road	City of Paso Robles	Two-Lane Collector	9,460	B	10,870	D
New Dry Creek Road, west of Airport Road	City of Paso Robles	Two-Lane Collector	1,740	A	1,740	A

Notes: Caltrans = California Department of Transportation; LOS = level of service; SR = State Route

[1] Average daily traffic. Note volume reported is the maximum volume on the given roadway segment within the project study area.

Unacceptable operations indicated in **bold**. Significant impacts highlighted with gray shading.

Source: Data compiled by Fehr & Peers in 2010.

Implementation of the Master Reuse Plan would further exacerbate unacceptable operating conditions on the SR 46 East segments between U.S. 101 and Buena Vista Drive and between Union Road and Airport Road. This would be a ***significant*** *cumulative impact, and the project's contribution would be cumulatively considerable (Impact 4.11-27).*

Impact 4.11-28: Cumulative Site Access Impacts

Implementation of Master Reuse Plan would add vehicle traffic to the intersection of Airport Road and Dry Creek Road. The intersection would continue to operate at acceptable levels during the a.m. peak hour; however, the operations of the intersection would degrade to LOS F during the p.m. peak hour. Based on the proposed site access plan for the CDCR property, vehicle queues on Airport Road would not spill back between the west leg of Old Dry Creek Road, the east leg of Dry Creek Road, and the west leg of New Dry Creek Road. Further, no conflicts would occur at the northern site access location with the proposed improvements.

Implementation of Master Reuse Plan would generate vehicular traffic that would cause an operational deficiency according to City standards at the Airport Road and Dry Creek Road intersection. This deficiency would occur on the western approach of Dry Creek Road for vehicles trying to make a left (southbound) turn onto Airport Road during the p.m. peak hour. This would be a ***significant*** *cumulative impact and the project's contribution would be considerable (Impact 4.11-28).*

4.11.4 Proposed Mitigation Measures

Already Planned Improvements

Table 4.11-13 summarizes the already planned intersection and roadway improvements in the study area, including responsible agency, and funding and improvement status. Some of these improvements have been identified in the following sections as mitigation measures for the project's impacts.

Table 4.11-13 Already Planned Roadway and Intersection Improvements				
Location	Agency	Planned Improvements	Funding Status	Project Status
U.S. 101 Southbound Ramps and SR 46 East	Caltrans	2nd WBLT, 3rd EB Thru Lane. Widen SB on-ramp to 2 lanes[1]	Funded	Construction 2011
U.S. 101 Northbound Ramps and SR 46 East	Caltrans	3rd and 4th WB Thru Lanes[1]	Funded	Construction 2011
Union Road and SR 46 East	Caltrans	At-grade intersection improvements at Union Road/SR 46 East[2]	Unfunded	In 2010 RTP-PSCS
SR 46 East	Caltrans	SR 46 East Widening from 2 to 4 lanes from Airport Road to Shandon rest stop	Funded	Under Construction
Union Road	City of Paso Robles	Provide Union Road Overcrossing of Huerhuero Creek[1]	Partially funded through City Impact Fee	In 2010 RTP-PSCS
Airport Road and Old Dry Creek Road	City of Paso Robles	Realign Airport Road and construction roundabout[2]	Unfunded	In 2010 RTP-PSCS
Golden Hill Road and Union Road	City of Paso Robles	Roundabout[1]	Partially funded through City Impact Fee	Final Design

Notes: SR = State Route; U.S. 101 = U.S. Highway 101. NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, LT= left-turn movement, T = through movement, RT = right-turn movement

[1] Identified in City of Paso Robles Development Impact Fee Program.

[2] Identified in SLOCOG's 2010 *Regional Transportation Plan – Preliminary Sustainable Community Strategy* (RTP-PSCS).

Source: Data compiled by Fehr & Peers in 2010.

LESS-THAN-SIGNIFICANT IMPACTS

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.11-3: Impacts on Intersection Operations at Buena Vista Drive and SR 46 East Intersection
Impact 4.11-7: Existing plus Project Intersection Impact at Jardine Road and SR 46 East
Impact 4.11-8: Existing plus Project Intersection Impact at Airport Road and Dry Creek Road
Impact 4.11-10: Impacts on Roadway Segments
Impact 4.11-11: Public Transit Impacts
Impact 4.11-12: Impacts on Bicycle and Pedestrian Facilities
Impact 4.11-14: Emergency Access Impacts
Impact 4.11-15: Safety Hazard Impacts Due to a Design Feature
Impact 4.11-16: Air Traffic Safety Hazards
Impact 4.11-20: Cumulative Impacts on Operations at Buena Vista Drive and SR 46 East Intersection
Impact 4.11-24: Cumulative (2025) Impacts on Operations at Jardine Road and SR 46 East Intersection
Impact 4.11-25: Cumulative (2025) Plus Project Intersection Impact at Airport Road and Dry Creek Road
Impact 4.11-26: Cumulative (2025) Plus Project Intersection Impact at Golden Hill Road and Union Road

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED

The following transportation impacts were identified as potentially significant or significant.

Mitigation Measure 4.11-1: Impacts on Operations at U.S. 101 Southbound Ramps and SR 46 East Intersection

Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees for each respective project through the payment of City of Paso Robles development impact fees to construct a second westbound left-turn lane and third eastbound through lane at the U.S. 101 Southbound Ramp and SR 46 East intersection and widen the southbound on-ramp to provide two receiving lanes. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. This improvement would improve operations during the weekday a.m. and p.m. peak hours to LOS B and LOS C, respectively. Adequate right-of-way is available for this improvement and this improvement is currently under construction and will be complete prior to full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level.

Mitigation Measure 4.11-2: Impacts on Operations at U.S. 101 Northbound Ramps and SR 46 East Intersection

Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees through the payment of City of Paso Robles development impact fees to construct two additional westbound through lanes at the U.S. 101 Northbound Ramp and SR 46 East intersection. This improvement would improve operations acceptable LOS. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. Adequate right-of-way is available for this improvement and this improvement is currently under construction and will be complete prior to full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level.

Mitigation Measure 4.11-4: Impacts on Operations at Golden Hill Road and SR 46 East Intersection

Recently the City completed the construction of the following improvements to widen the Golden Hill Road and SR 46 East intersection to provide:

- two left-turn lanes, one through lane, and one shared through/right-turn lane (northbound);
- two left-turn lanes, one through lane, and one right-turn lane (southbound); and
- two left-turn lanes, two through lanes, and one right-turn lane (eastbound and westbound).

The construction of these improvements would improve operations to LOS C during the a.m. and p.m. peak hours. No new significant impacts would occur with implementation of this mitigation, as they are already complete. With this improvement, this impact is reduced to a less-than-significant level.

Mitigation Measure 4.11-9: Impacts on Intersection Operations at Golden Hill Road and Union Road Intersection

Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees through the payment of City of Paso Robles development impact fees to construct a roundabout at the Golden Hill Road and Union Road intersection with dual lanes in the southbound direction through the roundabout. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. This improvement would improve operations to acceptable LOS. The City is investigating the acquisition of right-of-way for this improvement and this improvement is currently in the design phase and will be completed before full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level.

Mitigation Measure 4.11-13: Site Access Impacts

Option A: Before buildout of the Master Reuse Plan, CDCR will fully fund and will construct a center acceleration lane on Airport Road south of the east leg of Dry Creek Road to provide adequate queuing area so that westbound left-turning vehicles could make a two-stage left-turn—i.e., westbound left-turn vehicles could cross the northbound lane when an adequate gap in traffic occurs and then pause in the center acceleration lane

before merging into the southbound lane on Airport Road. Adequate right-of-way is available and the improvement could be implemented using the existing width and the striped median between the intersections as shown in Exhibit 4.11-10 and 4.11-11. No new significant impacts would occur with implementation of this mitigation measure. With implementation of this improvement, the Airport Road/Old Dry Creek Road intersection would operate at an acceptable LOS C during the a.m. peak hour and LOS D during the p.m. peak hour.

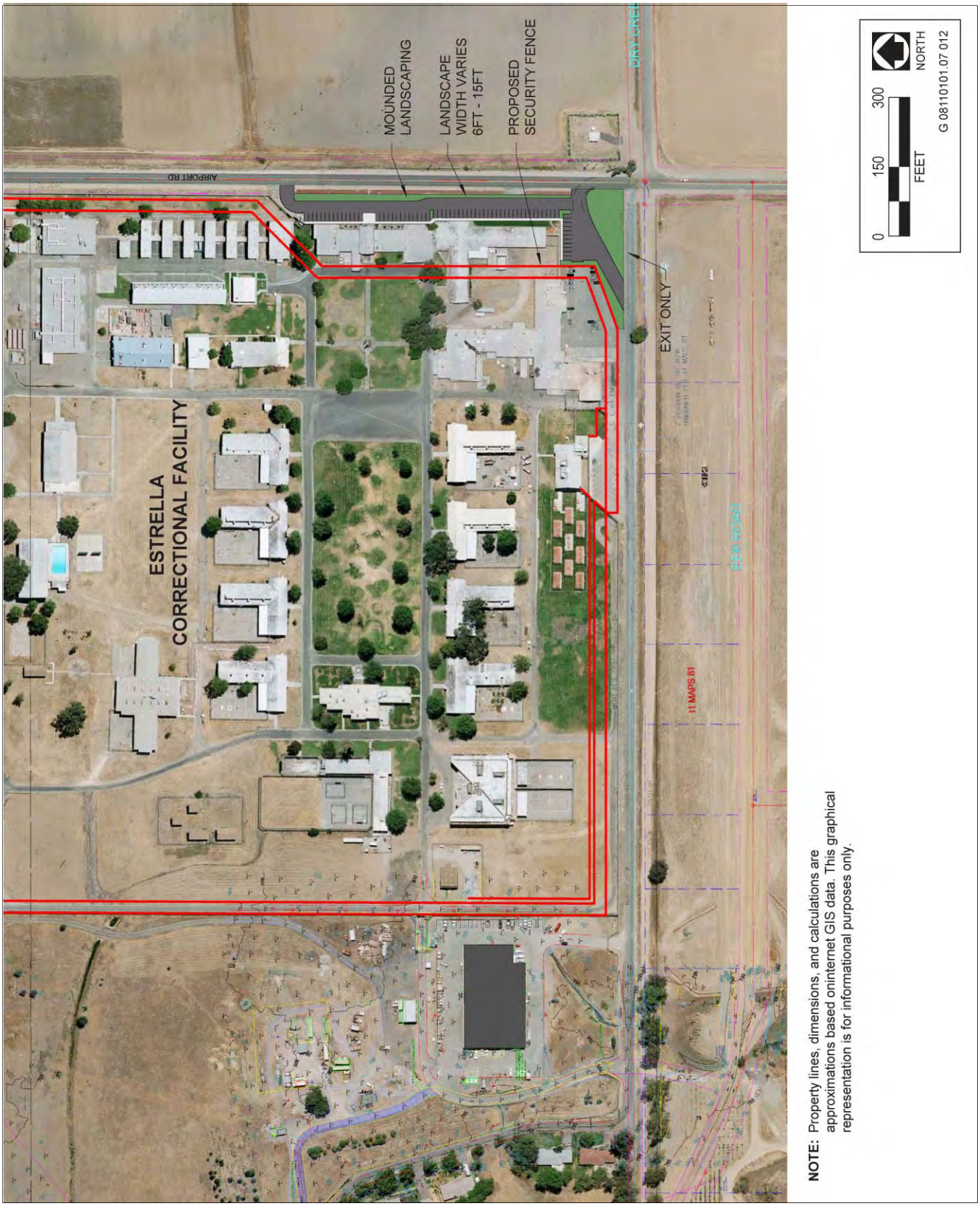
Option B: An alternative to mitigate the site access impact at Airport Road/Dry Creek Road intersection would be to stagger the administrative shifts at the Estrella and Reentry facilities so that vehicles arrive/depart during different times during the peak period. If the reentry facility's administrative staff shift ended at 4 p.m., while the Estrella staff ended at 5 p.m., the intersection of Airport Road/Dry Creek Road would operate at acceptable levels during the a.m. and p.m. peak hours, based on the City's thresholds.

Option C: Another design option would be to provide access to the southern portion of the site from New Dry Creek Road through the planned Winery Row *Paso* to the western property boundary. Two potential alignments are under consideration. One alignment involves extending the existing service driveway south to provide a connection between New Dry Creek Road and Old Dry Creek Road. The second would extend Old Dry Creek Road west toward Huerhuero Creek, and connect directly with New Dry Creek Road. These two options are presented in Exhibit 4.11-12. Either of these alternatives would remove the traffic generated by the Estrella Facility from the Airport Road and Old Dry Creek Road intersection, improving its operations to LOS D or better during the a.m. and p.m. peak hours, which are acceptable levels based on the City's LOS thresholds. The Airport Road and New Dry Creek Road intersection would also operate at acceptable levels during the a.m. and p.m. peak

hours. Implementation of this alternative would result in additional construction and paving to connect Old and New Dry Creek Roads. In general, these impacts would be limited to biological resources, cultural resources, air quality and noise similar to the impacts identified in the DEIR. No new significant environmental impacts would occur with implementation of this mitigation. However, this option would require the purchase of property in order to secure access, which may not be feasible.

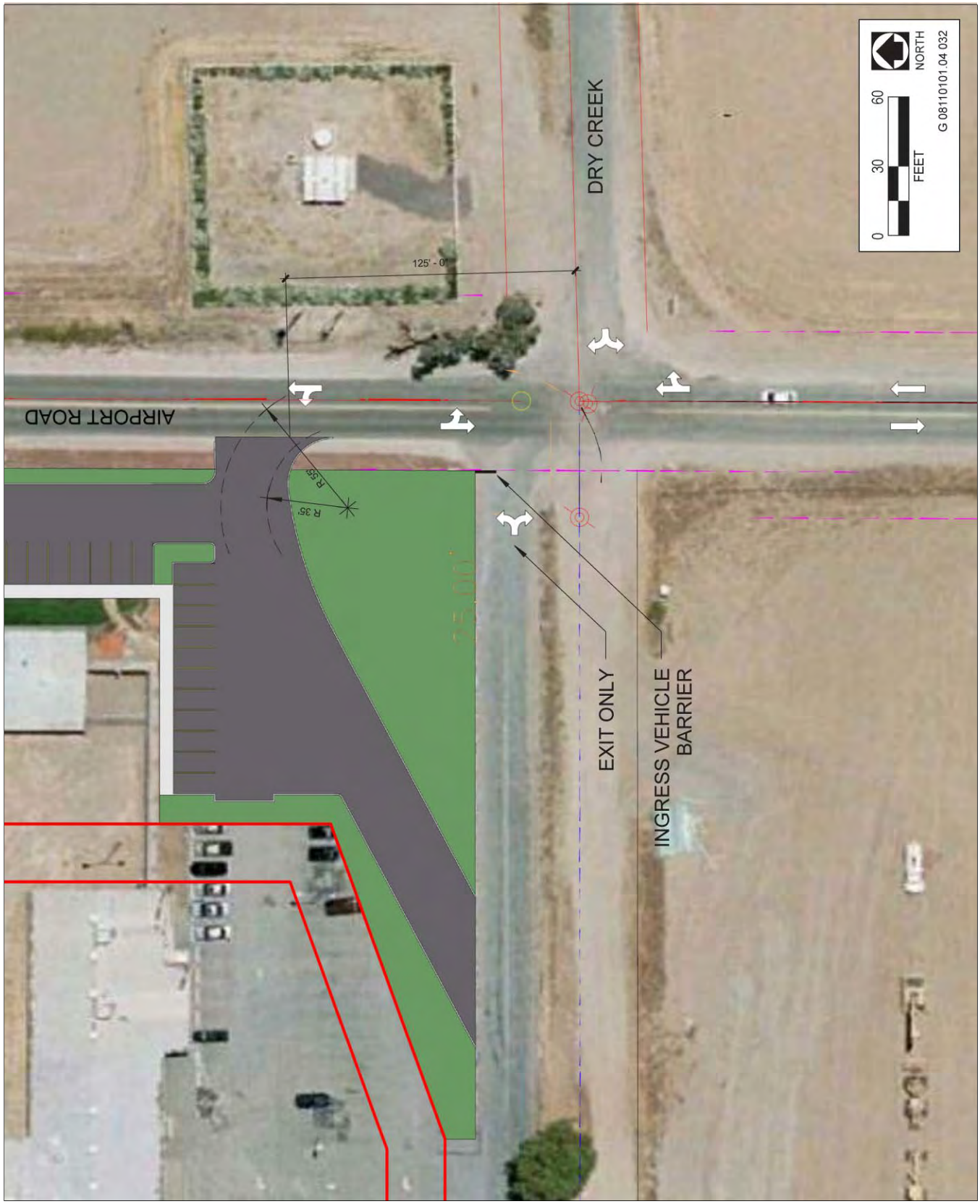
Option D: A third design option for Airport Road. Under this option, CDCR would contribute funding to the development of conceptual plans for the easterly relocation of Airport Road and the construction of a roundabout at the intersection of Airport Road and the east leg of Dry Creek Road. The roundabout would be located south of the project's site access on Airport Road and it is anticipated that vehicles accessing the CDCR property would travel along the new alignment of Airport Road, travel through the roundabout, and access the old alignment of Airport Road in order to access the site. This design option may result in the removal of potential turning movement conflicts at Airport Road/Dry Creek Road; however, no detailed plans of this improvement are available to determine if this improvement could reduce the project's site access impacts to a less-than-significant level. While this design option would be set back Airport Road from the eastern fence line of the Estrella Facility (i.e., by approximately 50-100 feet), the current fence line proposal would not encroach upon Airport Road beyond its existing alignment. While views of the project site may be somewhat softened by the realignment of Airport Road because of the increased distance between the roadway and CDCR property, views of the proposed facility would still be a substantial component of the viewshed and no significant changes would occur. Finally, it is unclear whether this design option would provide any other safety benefits, and because of the realignment, it could result in potential safety hazards by introducing two curves in the roadway alignment. Therefore, for the reasons described above, insufficient information is available to determine whether this design option would eliminate the project's site access impacts. Further, even if it is determined that this design option were feasible, it is unknown when this improvement would be implemented and if it would be implemented in time for project operation. As a result, CDCR has concluded that this mitigation would not be feasible at this time.

Implementation of any the above mitigation options A, B, or C would reduce the project's impacts to a less-than-significant level and would result in acceptable operations of the Airport Road and Old and New Dry Creek Road intersections.



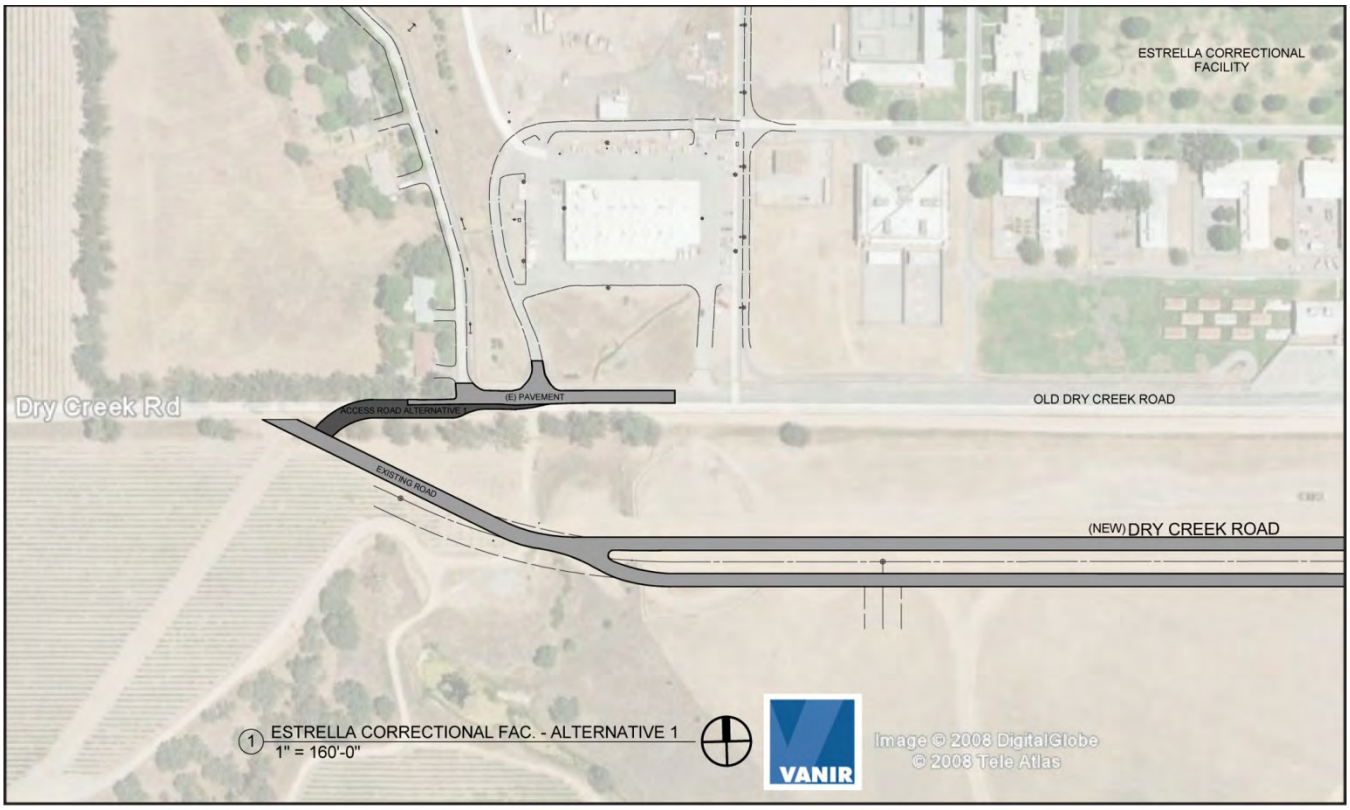
Source: Data compiled by Fehr & Peers in 2010

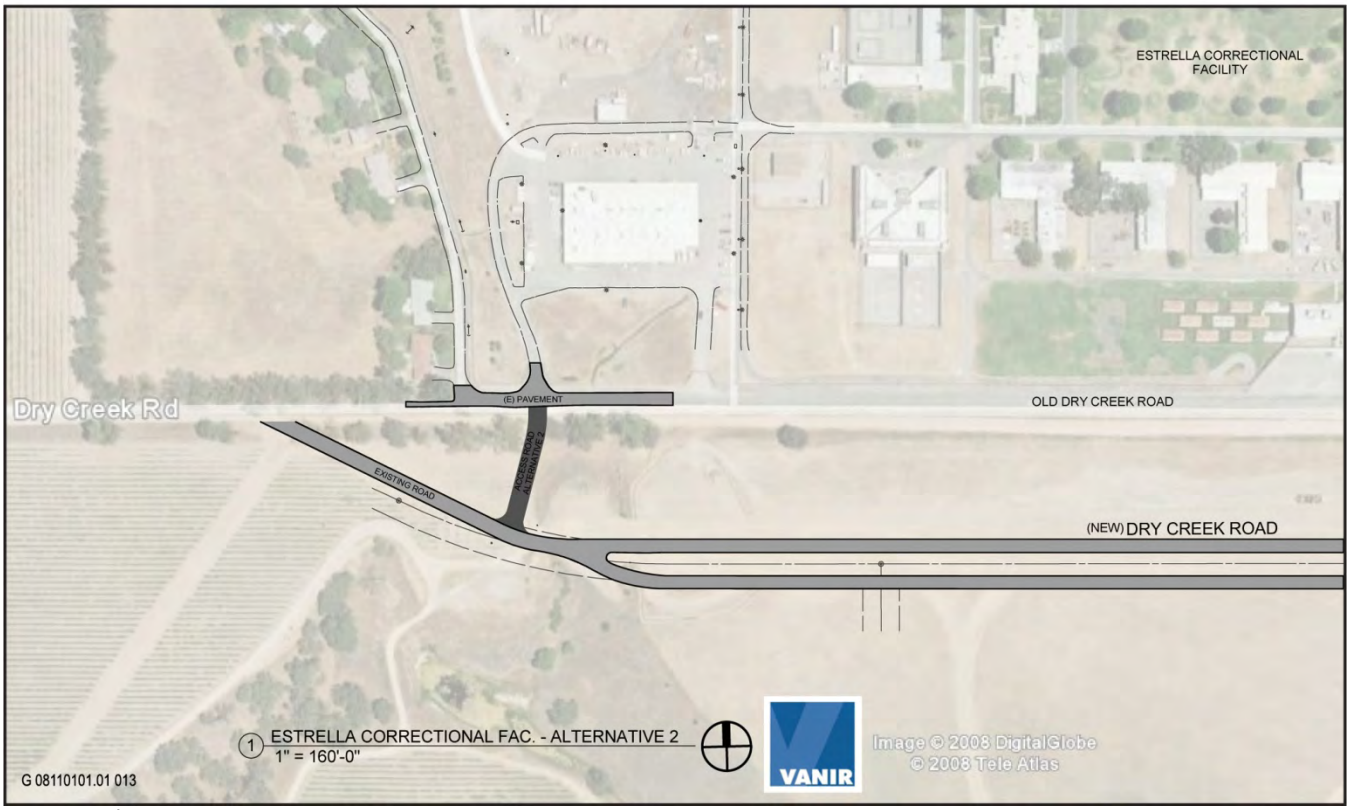
Proposed Site Access Improvements **Exhibit 4.11-10**



Source: Data compiled by Fehr & Peers in 2010

Close-in View of Proposed Site Access Improvements **Exhibit 4.11-11**





Source: Vanir 2010

Site Access Alternatives **Exhibit 4.11-12**

Mitigation Measure 4.11-28: Cumulative Site Access Impacts

Implement design option A and C (combined) or B as described above in Mitigation Measure 4.11-13.

Implementation of Mitigation Measure 4.11-28 would reduce the project's cumulative site access impacts to a less-than-significant level and would result in acceptable operations of the Airport Road and Old or New Dry Creek Road intersections.

Mitigation Measure 4.11-26: Cumulative Impacts on Operations at Golden Hill Road and Union Road Intersection

Upon authorization of the Estrella Facility or reentry facility, CDCR will contribute appropriate schedule-based fees through the payment of City of Paso Robles development impact fees to construct a roundabout at the Golden Hill Road and Union Road intersection with dual lanes in the southbound direction through the roundabout.[2] CAL FIRE would be responsible for paying their respective fees upon authorization of the project. This capacity enhancement would improve operations to an acceptable LOS. The City is investigating the acquisition of required right-of-way and this improvement is currently in the design phase and will be completed before full operation of the Master Reuse Plan. No new significant impacts would occur with implementation of this mitigation measure. Upon implementation, this impact would be reduced to a less-than-significant level, and the project's contribution would be less-than-considerable.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Mitigation Measure 4.11-5: Impacts on Intersection Operations at Union Road and SR 46 East Intersection

Upon authorization of the Estrella Facility or reentry facility, CDCR will coordinate with Caltrans to pay appropriate schedule-based fees toward the signalization of the Union Road and SR 46 East intersection and the construction of an overcrossing at Huerhuero Creek on the north side of SR 46 East on New Dry Creek Road to extend Union Road to Airport Road. CAL FIRE would be responsible for paying their respective fees upon authorization of the project. With implementation of these improvements, this intersection would operate at LOS D during the a.m. and p.m. peak hour. Operations at this intersection would improve (LOS D), but not to an acceptable level based on Caltrans's standards.

Intersection improvements at Union Road and SR 46 East and the Union Road extension and overcrossing of Huerhuero Creek are identified in the Administrative Draft of SLOCOG's *RTP-PSCS*. This improvement is in the early stages of planning; the next step includes the City pursuing completion of a Project Study Report (PSR).

The Dry Creek Road overcrossing of Huerhuero Creek is included in the City's traffic impact fee program. Payment of the City's development impact fees would partially mitigate the impact at Union Road and SR 46 East. However, because the at-grade improvements at Union Road and SR 46 East have not yet been finalized by Caltrans, Caltrans is the agency responsible for implementing the improvements, and it is unknown whether the improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered significant and unavoidable.

Mitigation Measure 4.11-6: Impacts on Intersection Operations at Airport Road and SR 46 East Intersection

Caltrans is currently constructing the widening of SR 46 East from Airport Road to the Shandon rest stop provide two travel lanes in each direction. Completion of this improvement is anticipated before the buildout of the Master Reuse Plan. The widening plans include acceleration and deceleration lanes to improve merging maneuvers for left- and right-turning vehicles from the side streets. However, even with these proposed improvements, the side-street movement at Airport Road would operate with increased vehicular delays compared to existing conditions. With implementation of this improvement, the intersection operations would improve, but

[2] Union Road/Golden Hill Road roundabout evaluation completed by W-Trans (June 15, 2010).

not to acceptable levels. The side-street left-turn movement would continue to operate at LOS F during the a.m. and p.m. peak hours.

The only additional feasible mitigation available to improve operations at this intersection would be to widen the southbound approach to accommodate a 150-foot right-turn pocket. This improvement would improve operations at Airport Road and SR 46 East; however, the intersection would continue to operate at LOS F. This improvement is not included in the City's traffic impact fee program. It is unknown whether Caltrans would implement this mitigation, and if implemented, whether it would be installed before buildout of the Estrella or reentry facility (whichever comes first). If implemented before buildout of the Estrella or reentry facility, this impact would be reduced to a less-than-significant level. However, for purposes of CEQA, because CDCR does not control the timing of when this mitigation would be implemented, this impact is concluded to remain significant and unavoidable.

Mitigation Measure 4.11-17: Construction Traffic Impacts

The project's construction impacts would occur on an interim basis during the 28-month construction period. Construction of some of the recommended mitigation measures (i.e., those that are currently under construction by the City or Caltrans, and the construction of a southbound right-turn pocket at Airport Road and SR 46 East identified in Mitigation Measure 4.11-6) before project construction begins in January 2011 would mitigate the project's construction impacts to a less-than-significant level. However, implementation of many of the intersection improvements is not guaranteed, as they are under City of Paso Robles or Caltrans jurisdiction. Therefore, the project's construction impacts would remain significant and unavoidable on an interim basis during construction.

Mitigation Measure 4.11-18: Cumulative Impacts on Operations at the U.S. 101 Southbound Ramps and SR 46 East Intersection

Project-level mitigation was identified at the U.S. 101 Southbound Ramps and SR 46 East intersection (see Impact 4.11-1). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft *RTP-PSCS* and the 2009 Caltrans SR 46 East *Comprehensive Corridor Study*, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.

Mitigation Measure 4.11-19: Cumulative Impacts on Operations at U.S. 101 Northbound Ramps and SR 46 East Intersection

Project-level mitigation was identified at the U.S. 101 Northbound Ramps and SR 46 East intersection (see Impact 4.11-2). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft RTP-PSCS and the 2009 Caltrans SR 46 East *Comprehensive Corridor Study*, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.

Mitigation Measure 4.11-21: Cumulative Impacts on Operations at Golden Hill Road and SR 46 East Intersection

Project-level mitigation was identified at the Golden Hill Road and SR 46 East intersection (see Impact 4.11-4). No additional improvements consistent with the vision of corridor, as described in SLOCOG's Administrative Draft RTP-PSCS and the 2009 Caltrans SR 46 East *Comprehensive Corridor Study*, are considered feasible at this intersection. This intersection under cumulative plus project conditions would operate unacceptably under cumulative plus project conditions. This would be a significant and unavoidable cumulative impact and the project's contribution would be considerable.

Mitigation Measure 4.11-22: Cumulative Impacts on Operation at Union Road and SR 46 East

CDCR will implement Mitigation Measure 4.11-5 above, which identifies payment of fees towards signalization of Union Road and SR 46 East and construction of an overcrossing at Huerhuero Creek on the north side of SR 46 East on New Dry Creek Road to extend Union Road to Airport Road. With these improvements, the intersection would operate at LOS D during the a.m. and p.m. peak hours. The Dry Creek Road overcrossing of Huerhuero Creek is included in the City's traffic impact fee program. Payment of the City's development impact fees would partially mitigate the impact at Union Road and SR 46 East. However, because the at-grade improvements at Union Road and SR 46 East have not yet been finalized by Caltrans, Caltrans is the agency responsible for implementing the improvements and it is unknown whether the improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered significant and unavoidable. Mitigation Measure 4.11-23: Cumulative Impacts on Operations at Airport Road and SR 46 East Intersection

CDCR will implement Mitigation Measure 4.11-5 and 4.11-22 above. With these improvements, the intersection at Airport Road and SR 46 East would be restricted to right-turns in and out only (full access through a traffic signal at Union Road and SR 46 East). Because these improvements have not been planned for by Caltrans, Caltrans is the agency responsible for implementing the improvements, and it is unknown whether improvements would be in place at the time the Master Reuse Plan would build out, this impact is considered cumulatively significant and unavoidable and the project's contribution would be considerable.

Mitigation Measure 4.11-27: Cumulative Impacts on Roadway Segments

The only feasible mitigation to reduce impacts along the SR 46 East segment, between U.S. 101 and Buena Vista Drive and the SR 46 East segment, between Union Road and Airport Road would be to widen SR 46 to six lanes (instead of four lanes), or upgrade the roadway to a four-lane limited-access freeway. These improvements are not consistent with the vision of the corridor as defined in the Administrative Draft of SLOCOG's *RTP-PSCS* and Caltrans' *Comprehensive Corridor Study*. At this time there are no known feasible improvements that can be implemented that fit the vision of the corridor. Therefore, this impact would remain cumulatively significant and unavoidable and the project's contribution would be considerable.

4.12 UTILITIES AND SERVICE SYSTEMS

This section describes the existing utilities and service systems that serve the CDCR property and evaluates the Paso Robles Property Master Reuse Plan's (Master Reuse Plan) potential effect on these services and utilities. This section covers:

- wastewater treatment and disposal,
- water supply,
- solid waste, and
- electricity and natural gas.

Note that the Paso Robles Property Master Reuse Plan (Master Reuse Plan) includes construction of a drainage system, including a retention basin that would be designed specifically to retain stormwater at its current level. All stormwater runoff above existing stormwater volumes would be retained onsite. Therefore, impacts associated with the capacity of the City's stormwater drainage system are not analyzed further in this section. However, please see Section 4.7, "Hydrology and Water Quality," for further discussion.

The Master Reuse Plan's potential effects on police services, fire protection, and schools are addressed in Section 4.10, "Public Services."

4.12.1 WASTEWATER TREATMENT AND DISPOSAL

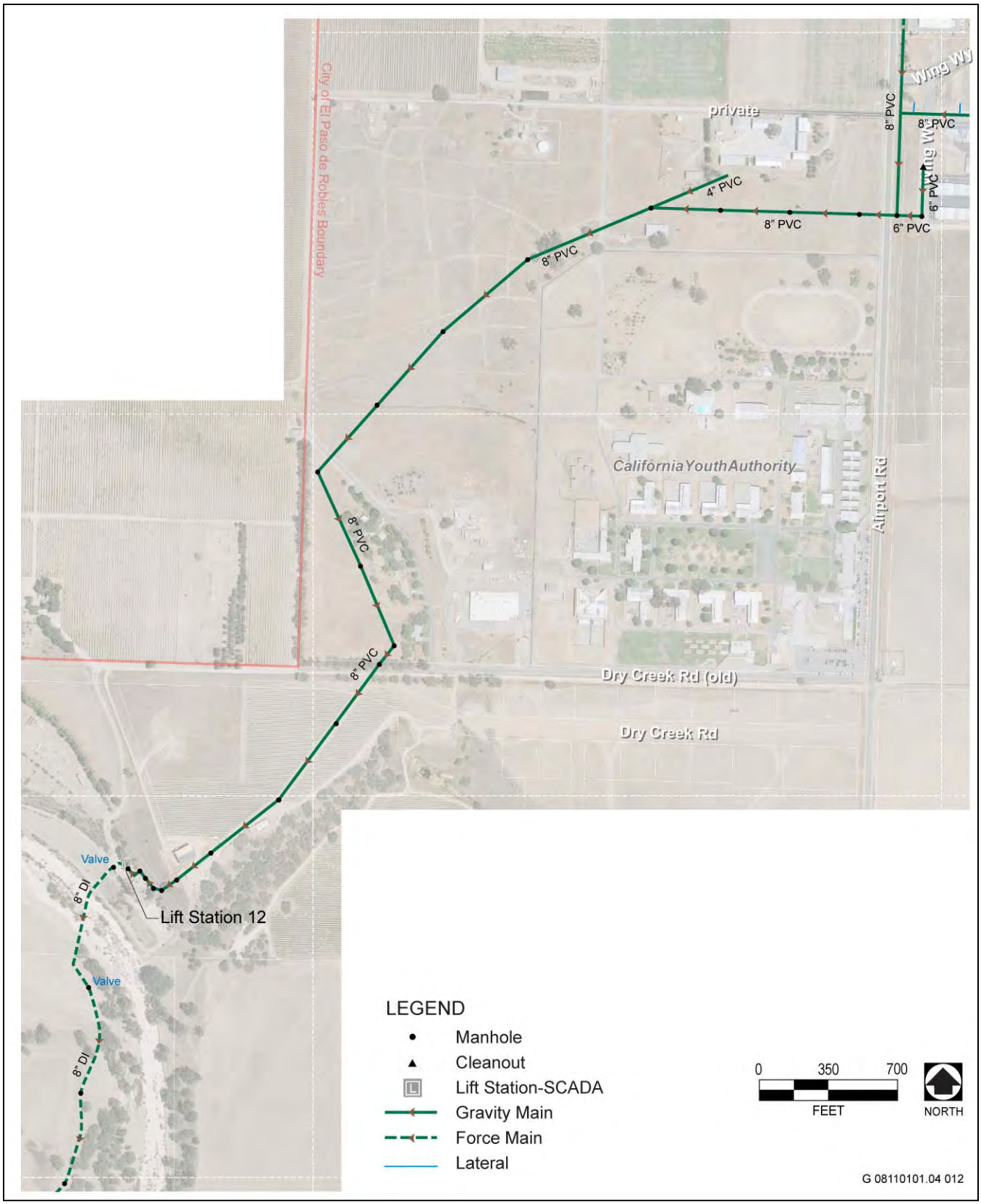
EXISTING CONDITIONS

The City has prepared a sanitary sewer master plan (SSMP) (2009), which provides a plan and schedule to properly manage, operate, and maintain all parts of the City's sanitary sewer system. According to the SSMP (City of Paso Robles 2007:1), the City of Paso Robles owns and operates 123 miles of sewers and 14 lift stations that provide service to more than 29,000 customers. Sewage is conveyed to a wastewater treatment plant (WWTP) at the north end of the city, adjacent to the Salinas River. The City has agreements to accept wastewater from CDCR (formerly California Youth Authority) for the former Division of Juvenile Justice (DJJ) facility. The City is responsible for sewer interceptors and conveyance of sewage to its WWTP. CDCR is responsible for its onsite sewer collection system up to the point of discharge to the interceptors. The CDCR site—comprising former, existing, and proposed Master Reuse Plan facilities—is not included in the SSMP (City of Paso Robles 2009:1).

An 8-inch City sewer line transects the CDCR property from northeast to southwest and transports wastewater generated by the Paso Robles Municipal Airport and the CDCR property to City Lift Station 12 (a former CDCR WWTP) (Exhibit 4.12-1). Approximately 4,100 feet of 8-inch sewer line runs across the site from Airport Road to Dry Creek Road with a fall in elevation from 794 feet to 773.7 feet. The average slope of the sewer line is 0.005.

Based on the (the City's design standard for pipeline capacity of 50% full), the pipeline has a capacity of approximately 192 gallons per minute (gpm) (Hayes, pers. comm., 2010). The City plans to construct an 18-inch sewer line in Airport Road (Thompson, pers. comm., 2010a). This 18-inch sewer line, in combination with an associated new 24-inch line that the City would construct in Dry Creek Road, would divert wastewater flows from the airport vicinity away from the 8-inch sewer line on the CDCR property to Lift Station 12. The remaining section of the 8-inch line on CDCR property would remain in use for CDRC service.

Located approximately one-quarter mile southwest of the CDCR property, Lift Station 12 is a dual-pump wet well system. According to the *City of El Paso de Robles Sewer System Collection Master Plan*, Lift Station 12 has a peak-flow capacity of 485 gpm (City of Paso Robles 2007:40). Although the lift station has a rated capacity of 530 gpm (City of Paso Robles 2007:38), the 485-gpm peak-flow capacity is based on pumping capacity with one



Source: Data compiled by AECOM in 2010

Existing Wastewater Facilities **Exhibit 4.12-1**

pump in reserve (City of Paso Robles 2007:40). According to City staff, the 2009 daily wastewater flows entering Lift Station 12 were 0.04 million gallons per day (mgd) (40,000 gallons per day [gpd]) (Slater, pers. comm., 2010a). Using the City's standard peaking factor of 2.0 to calculate peak flows from the average daily flows, peak flows entering the lift station were approximately 56 gpm (40,000 gpd x 2.0 peaking factor = 80,000 gpd [56 gpm]), leaving an available peak capacity of 429 gpm (i.e., 485 gpm minus 56 gpm).

The permitted capacity of the City's WWTP is 4.9 mgd (City of Paso Robles 2003). According to City public works staff, the wastewater treatment demand is currently 3.0 mgd (Thompson, pers. comm., 2010a). The City's general plan indicates that, based on a population growth rate of 3%, the WWTP is predicted to reach capacity by the year 2020 (City of Paso Robles 2003). (Note that this growth rate does not anticipate additional development at the CDCR property.) City public works staff indicated that, although the treatment plant is currently undergoing upgrades, these upgrades would increase the treatment quality and not the capacity of the plant (Thompson, pers. comm., 2010a).

While the WWTP has hydraulic capacity, it is not in compliance with its waste discharge requirements (WDRs) in its National Pollutant Discharge Elimination System permit, as provided by the Central Coast Regional Water Quality Control Board. The primary constituents of concern are salts and ammonia (nitrogen). The City is in the process of designing an upgrade to its WWTP, which will take the plant to an advanced secondary treatment level to address ammonia; the City is also working with high salt discharger industries to reduce salt flows to the plant. The plant is planned to be improved and operational by 2013 (Thompson, pers. comm., 2010b). The WWTP upgrade has undergone CEQA review and was approved in May 2010. According to the City's WWTP Upgrade Mitigated Negative Declaration, construction of the upgrade will be completed by 2013. All construction would take place within the boundaries of the existing WWTP site. Several significant impacts would result from the project, but all impacts can be reduced to a less-than-significant level. (City of El Paso de Robles. May 2010).

REGULATORY BACKGROUND

Federal and State Plans, Policies, Regulations, and Laws

No federal or state policies, regulations, or laws related to wastewater treatment and disposal are applicable to the proposed project.

Local Plans, Policies, Regulations, and Ordinances

The following *City of El Paso de Robles General Plan 2003* wastewater treatment and disposal policy is relevant to the project:

- **Policy C-1B:** Sewer Service. Provide adequate wastewater conveyance and treatment facilities to serve all parcels in the City.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on the existing wastewater collection, treatment, and disposal system is considered significant if implementation of the proposed project would do any of the following:

- result in a demand for wastewater conveyance or treatment service that is substantial in relation to the remaining WWTP capacity or if the demand exceeds the capacity;

- require or result in the construction or expansion of new wastewater conveyance or treatment facilities, the construction of which could cause significant environmental effects; or

- not meet wastewater treatment requirements of the Central Coast Regional Water Quality Control Board.

Project Impacts

Impact 4.12-1: Wastewater Treatment Capacity Impacts

According to City public works staff, the existing wastewater treatment demand for the City's WWTP is currently 3.0 mgd (Thompson, pers. comm., 2010a). The City's WWTP is currently permitted to treat up to 4.9 mgd. Based on a population growth rate of 3%, the WWTP is predicted to reach capacity by the year 2020 (City of Paso Robles 2003). However, this growth rate does not include additional development on the CDCR property.

Implementation of the Master Reuse Plan would generate approximately 163,000 gpd (0.16 mgd) of wastewater, based on CDCR's projected wastewater flow rate of 100 gpd per inmate (see Table 4.12-1 below). This flow rate is based on project design, including the use of water conservation devices, and is less than flow rates estimated at many of the older CDCR facilities in the state that were designed without significant water conservation features, and is lower than the 150 gpd per inmate at the DJJ facility that will be upgraded (including installation of water conservation devices) for the Estrella Adult Correctional Facility (Estrella Facility). The project will include a flow meter and other related infrastructure to monitor flow from the site.

A 1984 agreement exists between the City and CDCR that the City will provide wastewater to the CDCR property for 490 wards at 150 gpd per ward, or a total flow of . Applying the same wastewater flow rate, the City has agreed to provide up to 73,500 gpd (0.07 mgd) of wastewater service to the site. The City currently has remaining available wastewater treatment capacity of 1.9 mgd. Therefore, the new wastewater generated by the proposed project, above and beyond the current agreement, is 89,500 gpd (0..09 mgd). (The wastewater demand generated by the Master Reuse Plan represents approximately 4% of the City's available capacity, less than 1 year's worth of treatment capacity.) The Master Reuse Plan would build out in approximately 28 months. Therefore, at the time CDCR seeks wastewater treatment service approximately 1.0 to 1.2 mgd of available treatment capacity would remain, which is sufficient to accommodate the wastewater treatment demands of the proposed project. Therefore, the Master Reuse Plan would not result in the need for new or expanded wastewater treatment facilities that could result in an impact on the environment.

Table 4.12-1
Wastewater Demand Associated with the Proposed Master Reuse Plan

	Number of Beds	CDCR Flow Rate (gpd/inmate)	Total gpd	Total mgd
Estrella Facility	1,000	100	100,000	0.10
CAL FIRE facility	130	100	13,000	0.01
Reentry facility	500	100	50,000	0.05
Total	1,130	–	163,000	0.16
City Wastewater Agreement	(490)	150	(73,500)	(0.07)
Total New Demand		**–**	**89,500**	**0.09**

Notes: CAL FIRE = California Department of Forestry and Fire Protection; CDCR = California Department of Corrections and Rehabilitation; gpd = gallons per day; gpd/inmate = gallons per day per inmate; mgd = million gallons per day.
Source: Data compiled by CDCR, VANIR Construction, and Ascent Environmental in 2010

However, while hydraulic capacity would be available, the project would contribute flows that could exacerbate violation of the WDRs at the WWTP, especially related to ammonia (the project would not generate high levels of salt because it does not include high salt-generating facilities). The upgrade to the WWTP is planned to be completed by 2013, around the same time as completion of the project. No additional facilities are needed to serve

the project (Thompson, pers. comm.., 2010b); therefore the impacts of the plant upgrades, already evaluated by the City in its MND, would be less-than-significant and the project would not add to these impacts. If the upgrade is not completed, the project would contribute to a significant impact related to water quality violations at the WWTP.

Implementation of the Master Reuse Plan would not increase wastewater demands beyond the City's available wastewater treatment capacity. No new or expanded wastewater treatment facilities that could result in impacts on the environment would be required. However, the wastewater treatment plant is not in compliance with waste discharge requirements, particularly ammonia (as it relates to wastewater from the project); if the project is operational prior to completion of upgrades to the wastewater treatment plant, it could contribute to violations of the waste discharge requirements. This would be a ***significant impact*** *(Impact 4.12-1).*

Impact 4.12-2: Wastewater Collection and Conveyance System Impacts

Two wastewater collection facilities currently serving the CDCR property have been identified by City staff as having potentially limited capacity: the 8-inch sewer line transecting the CDCR property and City Lift Station 12. The capacities of these facilities with respect to project wastewater are discussed below.

8-Inch Sewer Line

Approximately 4,100 feet of 8-inch sewer line runs across the CDCR property from Airport Road to Dry Creek Road and the pipeline has a total capacity of approximately 192 gpm (Hayes, pers. comm., 2010). The 8-inch sewer line currently accepts flows from the adjacent airport and some properties in the area. Currently, a total of 56 gpm of wastewater flows through the line. Therefore, available capacity of the 8-inch line is 136 gpm.

The Master Reuse Plan facilities would utilize the existing 8-inch line. As shown in Table 4.12-2, the peak flow generated by the proposed project would be 226 gpm. Therefore, the peak wastewater flows generated by operations under the Master Reuse Plan would exceed the available capacity of the 8-inch sewer line by 90 gpm.

Table 4.12-2
Projected Average and Peak Wastewater Flows for the Proposed Master Reuse Plan

	Number of Beds Proposed	CDCR Average Daily Flow Rate (gpd/inmate)	Average Flow (gpd)	Average Flow (gpm)	Peaking Factor[1]	Peak Flow (gpd)	Peak Flow (gpm)
Estrella Facility	1,000	100	100,000	69	2.0	198,720	138
CAL FIRE facility	130	100	13,000	9	2.0	25,920	18
Reentry facility	500	100	50,000	35	2.0	100,800	70
Total	**1,630**	**100**	**163,000**	**113**	**2.0**	**325,440**	**226**

Notes: CAL FIRE = California Department of Forestry and Fire Protection; CDCR = California Department of Corrections and Rehabilitation; gpd = gallons per day; gpd/inmate = gallons per day per inmate; gpm = gallons per minute.
[1] City of Paso Robles Engineering Design Guidelines Section VI-1 (City of Paso Robles 2010).
Source: Data compiled by Ascent Environmental in 2010

The City has indicated that it has plans to install an 18-inch sewer line in Airport Road. This expanded sewer line would divert all existing airport flows away from the 8-inch line, leaving the full 192-gpm capacity of the new, larger line available for CDCR flows. The environmental impacts associated with construction and operation of this 18-inch line would be limited to air quality (construction-related emissions), construction-related noise, and traffic disruption during construction, which have been analyzed in this DEIR (see Section 4.1, "Air Quality"; Section 4.9, "Noise"; and Section 4.11, "Transportation"). The 18-inch sewer line would not result in any new

impacts not analyzed in this DEIR. However, as noted above, even with the full capacity of the 8-inch sewer line available, sewer conveyance capacity would not be adequate to serve the proposed project.

As an alternative to (or in addition to) utilizing the existing 8-inch line, if the 18-inch line is constructed by the City before the proposed project requires a utilities connection, a new sewer line may be constructed across the north side of the CDCR property (Exhibit 4.12-2) to connect one or more of the proposed facilities (reentry, Estrella, or CAL FIRE) to the City's planned 18-inch sewer line in Airport Road. The separate line would be designed to accommodate peak wastewater demand from the proposed project (226 gpm) or the demand from the individual facility to which the line would be connected (see Table 4.12-2 for the flows from individual facilities).

Lift Station 12

According to the *City of El Paso de Robles Sewer System Collection Master Plan*, Lift Station 12 is has a peak-flow capacity of 485 gpm (City of Paso Robles 2007:40). Although the lift station has a rated capacity of 530 gpm (City of Paso Robles 2007:38), the 485-gpm flow capacity is based on pump capacity with one pump in reserve (City of Paso Robles 2007:40).

According to City staff, the 2009 daily wastewater flows entering Lift Station 12 are 0.04 mgd (40,000 gpd) (Slater, pers. comm., 2010a). Using the City's standard peaking factor of 2.0, peak flows currently entering the lift station are approximately 56 gpm. Therefore, capacity of Lift Station 12 available for new development is approximately 429 gpm. Implementation of the Master Reuse Plan would generate approximately 226 gpm (Table 4.12-2), which would not exceed the available peak-flow capacity (i.e., 429 gpm) of Lift Station 12. However, cumulative development in the basin served by Lift Station 12 would likely result in exceedance of the station's capacity, and the project would contribute to this exceedance. (Thompson, pers., com,.2010c)

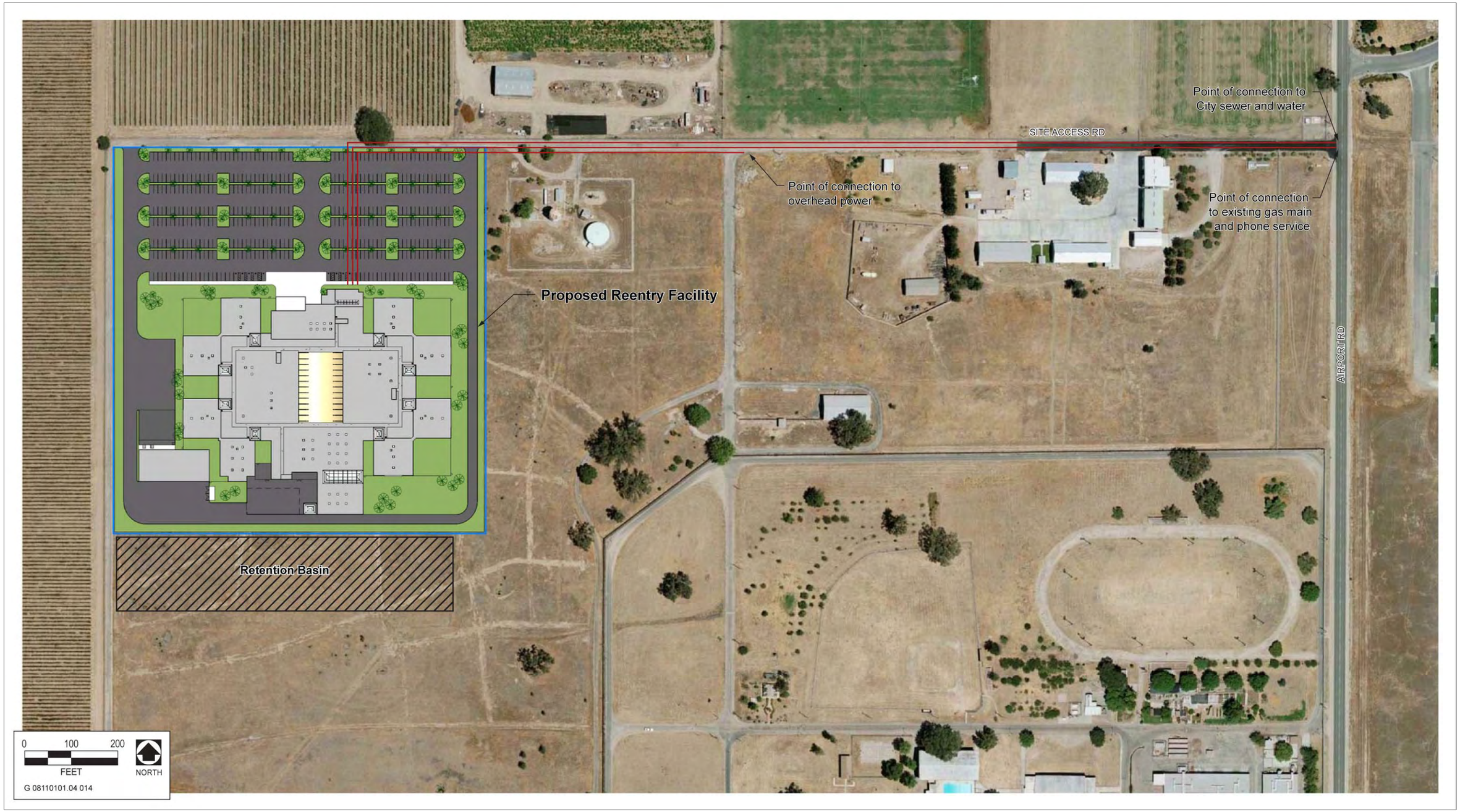
It is important to note that the City has indicated that approximately 0.012 mgd (12,000 gpd) of the average daily wastewater flows that flow through Lift Station 12 are from the former DJJ and existing CAL FIRE facilities (30% of the total wastewater flow into Lift Station 12) (Slater, pers. comm., 2010a). There were no inmates in 2009 and only nine staff positions were assigned to the CDCR site; however, less staff were there on a daily basis. At these flow rates, the nine positions would have generated an average of 1,333 gallons of wastewater per day per person, which is unlikely when an average per-person generation rate is 104 gpd (according to the City's 2003 water quality strategy report). It is possible that these high per-person wastewater rates are the result of groundwater and surface water infiltration into the City's wastewater system. CDCR is consulting with the City on its wastewater calculations and is currently working with the City to resolve the discrepancy (Gundrum, pers. comm., 2010). Although the existing wastewater generation rates do not change the conclusions of this analysis with respect to lift station capacity (the flows currently entering the lift station would not change regardless of the source), it does suggest that there may be system inefficiencies that, if appropriately addressed, may increase the available capacity of the lift station.

Implementation of the Master Reuse Plan would not exceed capacity of Lift Station 12, however overall development within the basin served by the lift station may result in exceedance of capacity. The peak wastewater flows generated by the Master Reuse Plan would exceed the capacity of the existing 8-inch sewer line. The impact on the sewer line would be ***significant*** *(Impact 4.12-2).*

PROPOSED MITIGATION MEASURES

Less-Than-Significant Impacts

No impacts were identified as less than significant.



Source: Vanir 2009, adapted by AECOM in 2010

Proposed Utility Connections **Exhibit 4.12-2**

Significant Impacts that Can Be Mitigated to a Less-Than-Significant Level

The following impact was identified as significant. Mitigation to reduce this impact to a less-than-significant level is recommended below.

Impact 4.12-2: Wastewater Collection and Conveyance System Impacts

- CDCR will include in the final construction plans a combination of water conservation devices and wastewater control devices to limit peak-flow wastewater generation. This will be accomplished by installing a combination of the following devices and measures:
  - electronically-controlled flushometers on inmate toilets in celled housing units, which will limit the number of times a toilet can be flushed per hour;
  - low-flush toilets in all staff and visitor's bathrooms;
  - waterless urinals in all staff and visitor men's bathrooms;
  - low-flow shower heads in all showers;
  - low-flow faucets in all bathroom sinks; and
  - xeriscape or drought-tolerant landscaping.
- CDCR will monitor its wastewater use over an 18-month period and will pay additional sewer hook-up fees if the average use exceeds 100 gpd per inmate. The fee will be based on the average 18-month generation, if it is above 100 gpd per inmate, calculated based on the City of Paso Robles per unit sewer hook-up rate in effect at the time.
- CDCR will pay appropriate sewer connection fees, based on its overall flow contributions, to upgrades to Lift Station 12. This payment, in combination with fees collected from other development, will allow the City of Paso Robles to upgrade the lift station sufficiently to meet capacity demands.

In addition, CDCR will implement one or both of the following two options:

Option 1: CDCR will upsize the existing 8-inch line to increase the peak-flow capacity by a minimum of 204 gpm (any reduction in this capacity must be based on revised flow calculations prepared by a licensed civil engineer in coordination with the City Public Works Department. The upsizing of the pipeline will require construction offsite, although the offsite pipeline easement is currently unvegetated (see Exhibit 4.12-1). The construction of the off-site portion of the upsized pipeline could result in impacts related to biological resources and cultural resources. No new significant environmental impacts would occur that have not been previously evaluated in this DEIR. Implementation of this mitigation measure would reduce this impact to a less-than-significant level because adequate wastewater conveyance capacity would be provided.

Option 2: If the City has completed construction of the 18-inch sewer line in Airport Road, CDCR will connect to the 18-inch line (within the adjacent roadway). Implementation of this mitigation measure would reduce this impact to a less-than-significant level because adequate wastewater conveyance capacity would be provided.

Significant Impacts That Would Remain Significant and Unavoidable

Impact 4.12-1: Wastewater Treatment Capacity Impacts

- CDCR will pay sewer connection fees, based on the City of Paso Robles per unit rate in effect at the time of project approval. These fees will be used to help pay the costs of upgrading the wastewater treatment plant.

This measure would assure that CDCR contributes its fair share toward mitigation of this impact. Once the upgrades are constructed, the plant would be expected to meet water quality compliance restrictions. This would mitigate the impact to water quality from the City of Paso Robles, and including the project.

While CDCR's fee payment represents its proportionate contribution to funding mitigation of the water quality compliance issues at the treatment plant, the City of Paso Robles still needs to procure rate-based funding to construct and operate the improvements. Currently, there is no guarantee that fees will be collected in a manner timely enough to assure the upgrades will be in place by the time the project is operational, even though timely construction is planned. If this were the case, the project would potentially exacerbate the compliance issues, until such time that the plant upgrades are in place and operational. This would, therefore, be a potentially unavoidable significant short-term impact.

4.12.2 WATER SUPPLY

Paso Robles and CDCR have historically relied on groundwater. However, the groundwater table is in decline. Consequently, the City will be supplementing its supply with imported water from Lake Nacimiento as part of a regional water supply program. The City is in the process of design and construction of the approved water treatment plant, which is needed to treat Lake Nacimiento water. The plant is planned to be operational in 2014.

There are currently three options for providing potable water to the CDCR property. The first option would be to purchase approximately 219 acre-feet per year (afy) of Lake Nacimiento surface water from the San Luis Obispo County Flood Control and Water Conservation District (SLOFCWCD), and utilize the City's water treatment and delivery system (currently in the design phase) to deliver water to the CDCR property. Under this option, CDCR may need to use the City's current water supply (100% groundwater) until the City's proposed water treatment plant is complete (anticipated in 2013) and operating at a capacity to treat the project's purchased surface water, in addition to the City's surface water demands. The second option would be to connect CDCR facilities to the City's water distribution system and utilize its supply, which includes a mix of groundwater and surface water. The third option is to utilize existing wells on-site to provide potable water from groundwater (which may require on-site treatment). This option would continue the historic water supply option used to supply the DJJ facilities.

EXISTING CONDITIONS

The source of water supply for the CDCR property consists of four water wells. Two wells are the primary source and two are for backup in the event that one of the wells goes out of service.

Lake Nacimiento Water Project

Lake Nacimiento is an artificial impoundment built in the late 1950s to provide a more reliable supply of water for uses relying on the Salinas River. The Monterey County Water Resources Agency (MCWRA) served as the lead for construction of impoundment facilities. In 1959, SLOFCWCD signed an agreement with MCWRA that entitled SLOFCWCD to approximately 17,500 afy of the annual yield of Lake Nacimiento for uses in San Luis Obispo County; of this amount, 1,750 afy is earmarked for lakeside uses (e.g., homes, recreation) (SLO County 2004). To date, use of the Lake Nacimiento entitlement has been limited to the vicinity of the lake because of the lack of conveyance facilities. Efforts are under way to build a 45-mile pipeline to deliver the unused San Luis Obispo County (County) water supply to Paso Robles, Templeton, Atascadero, and San Luis Obispo (City of Paso Robles 2008). The total cost of the project, including design, construction, environmental permitting, and right-of-way, is estimated at about $176 million (SLO County 2010). An EIR was prepared and certified for the project in January 2004 and the pipeline is under construction. See more details further in this section.

SLOFCWCD, in conjunction with various stakeholders and five local entities representing the communities of Paso Robles, Atascadero, Templeton, San Luis Obispo, and County Service Area No. 10, Benefit Zone A (Cayucos), is implementing the Lake Nacimiento Water Project. This project is a proposed regional raw-water transmission facility that will deliver water from Lake Nacimiento to communities within San Luis Obispo

County. The project involves the development of an intake structure and pump station at Lake Nacimiento, approximately 45 miles of transmission pipeline ranging in size from 12 to 36 inches in diameter, three storage tanks, two intermediate pump stations, turnouts, control center, new Supervisory Control and Data Acquisition and project control system, and associated appurtenant facilities (SLO County 2010).

Currently, five purveyors, or initial participants, have executed water delivery entitlement contracts with SLOFCWCD: the City of Paso Robles, Atascadero Mutual Water Company, Templeton Community Services District, the City of San Luis Obispo, and County Service Area 10A. These public water distribution agencies serve the urban communities of Paso Robles, Atascadero, Templeton, San Luis Obispo, and Cayucos. The initial participants have requested 9,655 afy, which leaves a reserve capacity of 6,095 afy of available entitlements for the inclusion of additional participants in the future. The initial participants have the right of first refusal for the reserve capacity. Thus, if a new participant were to request a connection to the Lake Nacimiento Water Project, the initial participants would have the contractual right to increase their allocation before the new participant is granted entitlement to water (SLO County 2008).

City of El Paso de Robles Water Facilities

According to the *City of El Paso de Robles 2005 Urban Water Management Plan* (2005 UWMP), updated by the *Paso Robles Uptown/Town Centre Specific Plan Draft EIR* (Paso Robles 2010), referred to hereafter as the Uptown EIR, the City has 19 active wells distributed throughout Paso Robles and two inactive wells (one of which may be reactivated in the future) that extract water from the Paso Robles Groundwater Basin. Additionally, the City extracts Salina River underflow via 7 wells. Well pumping capacity ranges from 400 to 1,100 gpm in the wells pumping river underflow and from 200 to 950 gpm in Paso Robles Groundwater Basin wells (City of Paso Robles 2008:15).

City facilities also include five booster stations to pump water to higher elevations, four storage reservoirs that can store collectively up to 12,150,000 gallons, and 148 miles of water pipe ranging in diameter from 2 to 24 inches (City of Paso Robles 2008:16).

The City's water system is City-owned and operated. At this time the City neither imports water from nor exports water to any other agency. The City signed an agreement with SLOFCWCD on August 17, 2004, to purchase water from the Lake Nacimiento Water Project, which will deliver 4,000 afy of relatively high-quality, untreated water (City of Paso Robles 2008:16). The Pipeline North section of the Lake Nacimiento water distribution system, which would convey the water to Paso Robles, is expected to be complete this summer (2010). The City anticipates requesting an additional 1,400 afy of Lake Nacimiento water rights for future delivery above and beyond the original 4,000 afy (for a total of 5,400 afy) (Alakel, pers. comm., 2010a). The cost of securing this additional water would be recovered through water connection fees and, if needed, water surcharge fees. This additional water would allow the City to reduce future basin well pumping (City of Paso Robles 2008:20).

The City is progressing with its plans for a water treatment plant; the City's capital improvement program includes design of the water treatment plant to coincide with first availability of Lake Nacimiento water (City of Paso Robles 2008:16).

Existing City Water Supply Sources

The City historically has obtained its entire water supply from Salinas River underflow and groundwater; however, the 2005 UWMP indicates that future water supply would come from four sources: underflow and groundwater (river wells and basin wells), Lake Nacimiento water, and recycled water (City of Paso Robles 2008:19). Note City staff indicates that, since the preparation of the 2005 UWMP, use of recycled water is less likely to occur. Table 4.12-3 presents the City's planned water supplies; this data is based on the Uptown EIR

Table 4.12-3 City of Paso Robles Planned Water Supplies (afy)				
	2010	2015	2020	2025
Basin and River Wells	7,000	6,000	6,000	6,000
Lake Nacimiento Water	0	1,500	4,000	4,000
Recycled Water (projected use)	0	0	0	2,000
Total	**7,000**	**7,500**	**10,000**	**12,000**

Notes: afy = acre-feet per year.
Source: City of Paso Robles July, 2010

River Wells (underflow). The City has appropriative water rights to 4,600 afy of Salinas River underflow (Table 4.12-3). The combined capacity of the City's river wells is currently about 5,800 afy, with a summer production capability of about 3,600 gpm. Groundwater from river wells that are within 150 feet of surface flow in the river require treatment prior to distribution, as required by the U.S. Environmental Protection Agency's (EPA's) Surface Water Treatment Rule (1989). The City has already pumped 99% of the 4,600 afy—namely 4,558 acre-feet (af) in 2005—and anticipates similar full use of the underflow water rights permit source in future years (City of Paso Robles 2008:20).

Basin Wells. To date, the City's Paso Robles Basin wells have provided up to 4,103 afy (in 2007). The combined design production capability of all basin wells is about 8,150 gpm , although this total fluctuates based on the time of year and climatic conditions, and is less in the summer (approximately 5,300 gpm). Basin groundwater use will decrease substantially when Lake Nacimiento water becomes available. This short-term surplus of groundwater production capacity could potentially allow retirement of older or low-yield wells, provide backup capacity in time of water shortage or emergency, and offer the City the opportunity to site and install replacement basin wells (City of Paso Robles 2008:20).

In 2009, the 96,781 af of groundwater outflow from the Paso Robles Groundwater Basin was 99% of the perennial yield (97,700), a 5% increase from 2004 (SLO County 2010a:11). The basin as a whole in 2009 was not in overdraft (where the groundwater extraction rate surpasses recharge rate); however, considering the trend of decline, overdraft conditions may exist at the time the Master Reuse Plan begins operation. Furthermore, substantial declines have occurred in the Estrella subarea, which includes most of Paso Robles. Future increases in municipal, agricultural, and rural pumping could result in additional localized declines in groundwater levels and the potential for overdraft (City of Paso Robles 2008:20). According to the 2010 *Overview of the Estrella Subarea* (part of the *Paso Robles Groundwater Management Plan* currently being prepared by the County), overall groundwater levels have been steadily declining in the Estrella Subarea for many years as a result of groundwater pumping. A slow decline in groundwater levels occurred between 1960 and 1980. Between 1980 and 2000, groundwater levels stabilized. Since 2000, groundwater levels have fallen in response to increased groundwater pumping. The pumping depression that was identified previously appears to have expanded since 2000 in response to increased groundwater pumping and below-normal hydrologic conditions (SLO County 2010:10). The primary reason the City is importing Lake Nacimiento water is to reduce reliance on groundwater and return the basin to a better balance between use and recharge. Between 1997 and 2009 groundwater levels within the Estrella Subarea declined significantly. In some portions of the subarea, groundwater levels have declined by as much as 70 feet. In some cases, groundwater levels have dropped below the existing rural domestic wells, causing those wells to go dry and require deepening to restore production (SLO County 2010:10).

Groundwater Quality

Groundwater quality in the subarea is generally good to moderate for municipal use. Total dissolved solids (TDS), a measurement of the salts in the water, is typically used to assess water quality. For municipal purposes, the TDS

should be less than 500 milligrams per liter (mg/L), but can be usable up to 1,000 mg/L. TDS concentrations in local municipal supply wells, as reported in the 2007–2008 Consumer Confidence Reports, ranged from 370 to 740 mg/L (averaging 518 mg/L) for the City of Paso Robles (SLO County 2010a:12).

Groundwater quality in the subarea is generally suitable for irrigation, with slight to moderate restriction for trees and vines because of potential sodium and chloride ion toxicity. Two locations have been identified as contamination sites within the Paso Robles Basin. The first is Sherwood Well #6 located on Niblick Avenue just east of Creston Road (approximately 3.3 miles south of the CDCR property). Concentrations of perchloroethylene (PCE) have been detected but declined at this site between 2002 and 2010. The second site is located at 1730, 1740, and 1750 Commerce Avenue (approximately 3.8 miles south of the CDCR property). During a 2-year period, between 2006 and 2008, contaminant concentrations remained stable (SLO County 2010:12). Neither contamination site is in the project vicinity.

Geothermal water also is located in the basin. The influence of geothermal water on basin groundwater quality is generally restricted, based on structure and water levels, to basin sediments west of Paso Robles. Sodium concentrations across most of the Estrella Subarea do not appear to increase with depth, and no substantial influence on water quality from geothermal waters in basin sediments is found east of Paso Robles (SLO County 2010a:12).

Future City Water Supply Sources

Lake Nacimiento Water. The City of Paso Robles is a participant in the Lake Nacimiento Water Project and has rights to 4,000 afy of surface water. Additional water may be available to the City, beyond the 4,000 afy. The "Pipeline North," which is the segment of transmission line that will carry the raw water from Lake Nacimiento to Paso Robles, is substantially constructed with an anticipated completion date in late summer 2010. The City is currently in the process of designing a 4-million gallon per day water treatment facility that would receive the raw Lake Nacimiento water and treat it for distribution. The water treatment facility is expected to begin operation in 2014 (Alakel, pers. comm., 2010c and 2010e).

Recycled Water/Groundwater. The City assumes that by 2025, 2,000 afy of recycled water would be available to meet demands, assuming use of 4,000 afy of Lake Nacimiento water , with groundwater (basin wells and river wells) making up the difference (a reduction in groundwater use from current levels). It is projected that 5,000 afy of wastewater would be collected and treated by 2025. Reuse of this water would be limited by effluent quality, regulatory requirements at the time, and specific uses of potential customers. According to the UWMP, recycled water is recognized by the City as a reliable water supply resource that can help sustain the City's landscapes through the summer dry season and through drought without overburdening the potable water supply (City of Paso Robles 2008:22). The more recent Uptown EIR estimated that future demand for the City would be 12,000 afy in 2025, with 6,000 afy provided by groundwater, 4,000 afy by Lake Nacimiento, and 2,000 afy provided by recycled water; see Table 4.12-3.

REGULATORY BACKGROUND

Federal and State Plans, Policies, Regulations, and Laws

No federal or State of California plans, policies, regulations, or laws are applicable to the proposed project.

Local Plans, Policies, Regulations, and Ordinances

City of Paso Robles General Plan

The *City of Paso Robles General Plan 2003* includes the following policies related to provision of water that are relevant to the Master Reuse Plan:

- **Policy C-1A:** Water Source, Supply, and Distribution. Develop and implement various innovative water provision and conservation programs that help to ensure an adequate supply of water for the City.

City of Paso Robles Water Efficient Landscape Ordinance

The City recently adopted a water efficient landscape ordinance. The ordinance includes requirements such as limitations of turf area and slope, recirculating water systems, rain sensors, mulching requirements, etc. Because CDCR is a state agency, CDCR and its projects are not subject to local land use policies and ordinances. However, CDCR will consider this ordinance in the evaluation of the Master Reuse Plan.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a water supply impact is considered significant if implementation of the proposed project would do any of the following:

- require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- substantially degrade or deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; or
- cause the production of preexisting nearby wells to drop to a level that would not support existing land uses or planned uses for which permits have been granted.

Project Impacts

Impact 4.12-3: Impacts on Water Supplies and Facilities

Water Supply Option 1. CDCR Purchases Lake Nacimiento Surface Water Rights

The Master Reuse Plan would house a total of 1,630 inmates at full buildout. CDCR assumes an average daily water demand factor of 120 gpd per inmate, based on the design of the facility and the use of water conservation devices throughout. (Note that although this factor is based on the number of inmates, it encompasses potable-water demand for the entire facility, such as landscaping and staff.) The project would result in a total demand of 195,600 gpd (219 afy). CDCR would therefore purchase 219 afy of surface water rights from the Nacimiento Water Project. However, CDCR may continue to use onsite wells for landscape irrigation, which will be relatively minor (use of xeroscape/drought-tolerant landscaping), and this would reduce the overall demand for potable water to below 219 afy. CDCR would be responsible for paying for the water (CDCR also has the option of purchasing the water rights directly, which is a matter of process and would not change the analysis or conclusions in this EIR). Once the water rights are purchased, the City would treat the water in its planned water treatment facility (anticipated to begin operation in 2013) and would convey the water to the CDCR property through the City's existing distribution system. The proposed facilities would be connected to the City's existing water system, even though CDCR would own its own surface water rights. The City would be responsible for treatment and conveyance of the water to the CDCR property subject to applicable service agreements.

Lake Nacimiento Water Project EIR

The County Board of Supervisors certified an EIR for the Lake Nacimiento Water Project on January 4, 2004. Because CDCR proposes to utilize water from the Lake Nacimiento Water Project, the Master Reuse Plan would contribute to environmental impacts identified in the EIR. Therefore, pursuant to State CEQA Guidelines Section 15150, this EIR incorporates by reference the County's *Nacimiento Water Project EIR* (2004).

The 2004 EIR for the Lake Nacimiento Water Project identified several significant impacts for a raw water option. (The raw-water option was the option approved by the Board of Supervisors.) The EIR divides the impacts into four classes, pursuant to the County's CEQA guidelines: Class 4 impacts are considered "beneficial" effects of the project; Class 3 impacts are those impacts that are less than significant; Class 2 impacts are those impacts that are potentially significant and include feasible mitigation measures to reduce the impact to a less-than-significant level; and Class 1 impacts are those impacts that, after implementation of all feasible mitigation measures, cannot be reduced to a less-than-significant level (significant and unavoidable). For purposes of incorporating by reference the 2004 EIR, this discussion will focus on the Class 1 (less than significant after mitigation) and Class 2 (significant and unavoidable) impacts.

According to the 2004 EIR, the Lake Nacimiento Water Project (raw-water option) would result in several Class 2 impacts (less than significant after implementation of mitigation measures). The Class 2 impacts include both long-term operational impacts and short-term, construction-related impacts. The EIR indicated that the water project would result in long-term Class 2 impacts related to noise; air quality; hazards and hazardous materials; drainage, erosion, sedimentation; biological resources; traffic; and visual resources. The EIR includes feasible mitigation measures to reduce these long-term Class 2 impacts to a less-than-significant level. The impacts and mitigation measures discussed in the 2004 EIR are hereby incorporated by reference into this document. A summary of these impacts and mitigation measures can be found in the impact summary tables (page IS-1 through IS-67) of the 2004 EIR.

The EIR indicates that the water project would also result in short-term Class 2 impacts on the following environmental issue areas: hydrology and water quality; geology and soils; drainage, erosion, sedimentation; noise; hazards and hazardous materials; biological resources; cultural resources; utilities and public services; traffic; agricultural resources; and recreational resources. The EIR includes feasible mitigation measures to reduce these short-term Class 2 impacts to a less-than-significant level. The impacts and mitigation measures discussed in the 2004 EIR are hereby incorporated by reference into this document. A summary of these impacts and mitigation measures can be found in the impact summary tables (page IS-1 through IS-67) of the 2004 EIR.

It should be noted that the intake and regional distribution facilities for the Lake Nacimiento Project are nearly complete; therefore, although the Master Reuse Plan would contribute to short-term, construction-related Class 2 impacts and the need for mitigation, the majority of these impacts have already occurred and been mitigated; the project would not increase or change these impacts and they would occur with or without the project. In addition, because the City would enter into agreement with SLOCFCWCD on behalf of CDCR and because the City would provide the distribution facilities to convey the Lake Nacimiento water, CDCR would not be directly responsible for implementing any of the mitigation measures identified. That responsibility would lie with SLOCFCWCD, the City, and other participating agencies that would receive the water.

The EIR for the Lake Nacimiento Water Project identified two Class I impacts (significant and unavoidable). The Class 1 impacts include short-term impacts on air quality related to construction of the water conveyance facilities. Specifically, construction activities associated with implementation of the Lake Nacimiento Water project would generate air pollutant emissions that would exceed the San Luis Obispo County Air Pollution Control District's (SLOAPCD's) significance thresholds, even after implementation of all feasible mitigation measures. This impact would only last during the construction of the project, with air quality impacts during project operations being less than significant (SLO County 2004:ES-8). The EIR includes several mitigation measures to reduce this significant impact to the maximum extent feasible. These mitigation measures include implementation of standard SLOAPCD dust control measures, implementation of various activity management techniques primarily related to construction scheduling, as well as various measures to reduce construction-related emissions of oxides of nitrogen (NO_X) and reactive organic compounds (ROCs), including implementation of best available control technologies (BACT) for reduction of NO_X. Although CDCR would purchase up to 219 afy of Lake Nacimiento water, the Master Reuse Plan would not alter the construction needed to deliver water, so it would not contribute to this Class 1, significant and unavoidable impact. As with the short-term Class 2 impacts,

because construction of the intake and regional distribution facilities for the Lake Nacimiento project are nearly complete, the significant impact has mostly already occurred.

The other Class 1, significant and unavoidable impact identified in the Lake Nacimiento Water Project EIR is growth inducement. The EIR states that countywide, the growth-inducing impacts of accepting supplemental water supplies from the Lake Nacimiento Water Project could be considered significant, adverse and unavoidable.

However, impacts could vary locally depending on how project supplies are used by each project participant (SLO County 2004:ES-8). In the case of the Master Reuse Plan, the City of Paso Robles, which is already a contracted participant in the Lake Nacimiento Water project, would purchase the additional up to 219 afy on behalf of CDCR. Although CDCR was not identified as a participant in the Lake Nacimiento Water Project EIR and is not included in the buildout assumptions in the City's general plan, the proposed project would not generate substantial population growth such that it would exceed the adopted growth plans for the City (see Section 4.4, "Employment, Population and Housing").

As part of its approval of the Lake Nacimiento Water Project, the County Board of Supervisors adopted a statement of overriding considerations, whereby the board acknowledged the project's potential to result in significant impacts on the environment, but identified various benefits of the project that outweighed, in the board's opinion, the environmental impacts resulting from the project.

On February 5, 2008, the County Board of Supervisors adopted an addendum to the EIR that identified minor changes to the project description, including more specific information about the number of participants, as well as minor modifications in the specific locations of pipeline alignments, turnouts, storage tanks, pump stations, staging areas, and cultural resources. The addendum also addressed diverting lake and river surface water for use during construction, primarily for dust control. The addendum indicated that the modifications to the Lake Nacimiento Water Project would not result in either new environmental effects or a substantial increase in the severity of previously-identified significant effects (SLO County 2008:41). This EIR also incorporates by reference the 2008 addendum adopted for the Lake Nacimiento Project.

Lake Nacimiento Water Supply Reliability

The Lake Nacimiento Water Project EIR states that the minimum (worst-case) lake storage reserve available for the Lake Nacimiento Water Project at the onset of drought is 12,000 af. This minimum storage reserve is guaranteed by the 1959 agreement. The most severe 1-year drought in the historical record for lake inflow was in 1976–77 (which followed the most severe precipitation drought year of 1975–76). Between October 1976 and September 1977, the upstream gauge into the reservoir measured a total of 4,150 af. Using a 2:3 ratio, the net reservoir inflow available to the Lake Nacimiento Water Project during the 1976–77 year was estimated at approximately 6,220 af. Therefore, under worst-case conditions, a single-year drought would result in availability of 18,220 af for Lake Nacimiento Water Project deliveries, and there would be no shortage (SLO County 2004:5.1-37).

A similar analysis for the worst-case, 2-year (1975–77) drought shows that the available water for Lake Nacimiento Water Project in 1975–76 would be 21,380 af (12,000 af minimum pool storage and 9,380 net inflow). The second year of this drought would begin with only 5,180 af in storage; therefore, the total available water for Lake Nacimiento Water Project would be 11,400 af. Under these conditions, there would be approximately 4,800 af deficit in Lake Nacimiento Water Project deliveries (SLO County 2004:5.1-37).

The worst 3-year drought (1959–1961) and 4-year drought (1987–1990) at the lake, however, show no deficit in Lake Nacimiento Water Project deliveries, based on a net inflow analysis. Even in the driest year of these two droughts (1989–90), there was approximately 16,150 af of net reservoir inflow, with ample storage reserve left from 1988–89 to permit full Lake Nacimiento Water Project deliveries (SLO County 2004:5.1-37).

In summary, if the Lake Nacimiento Water Project had been operating since 1958, there could have been 1 year (1976–77) during which there would have been a reduction or interruption of full Lake Nacimiento Water Project deliveries. The estimated deficit in deliveries in 1976–77 could have been approximately 4,800 af (SLO County 2004:5.1-37).

The above worst-case analysis does not take into account reservoir management by Monterey County Water Resources Agency (MCWRA) to uphold SLO County's first right to water, nor does it take into account the historical lake levels on September 30 of each year. Under the historical reservoir management practices, the Lake Nacimiento Water Project deliveries would have continued during the 1975–77 drought, because there was adequate water in storage during the first drought year (1975–76) (SLO County 2004:5.1-37).

The EIR further states that, under Nacimiento Water Project operations, MCWRA and SLO County must recognize that releasing all the water down to minimum pool during these drought years could result in a Lake Nacimiento Water Project shortage if the drought were to continue. Therefore, although the drought reliability analysis indicates a potentially significant impact of reduced deliveries during drought, the impact can be mitigated to a less-than-significant level through reservoir management. The EIR includes a mitigation measure (WQ-2), which requires the County to (1) monitor reservoir storage and precipitation patterns; (2) notify MCWRA when conditions are such that releases down to a minimum pool on September 30 could result in a shortage for the Lake Nacimiento Water Project, if drought persisted along historical patterns; and (3) recommend an alternative minimum level of September 30 storage for maintaining Lake Nacimiento Water Project deliveries through drought and ensuring the County's first right to water (SLO County 2004:5.1-38).

Therefore, the provision of Lake Nacimiento surface water to the City would be reliable during normal, single-dry, and multiple-dry year drought scenarios. It should be also noted that the intake facility at Lake Nacimiento would draw from several depths of the lake; therefore, water supply would be available, even when lake levels drop substantially (Alakel, pers. comm., 2010d).

Lake Nacimiento Water Project Capacity

As mentioned above under "Existing Conditions," there is currently a reserve capacity of 6,095 afy for an increase in Lake Nacimiento entitlements. These are firm water rights, within the 17,500-afy agreement, and the environmental impacts of the Lake Nacimiento Water Project have been fully evaluated in the EIR certified in 2004 and the addendum adopted in 2008 by the County.

The City of Paso Robles, on behalf of CDCR, would request up to 219 afy for the Master Reuse Plan. This represents 4% of the existing Lake Nacimiento reserve capacity, and is available for use, upon approval. Therefore, SLOCFCWD would not exceed the capacity of the Lake Nacimiento Water Project.

City of Paso Robles Water Treatment Plant

The City would provide treatment of the additional up to 219 afy of Lake Nacimiento water purchased by CDCR. The City is a contracted participant for 4,000 afy of Lake Nacimiento raw surface water. To treat the raw water, the City is currently designing a treatment facility, anticipated to be operational in 2014.

An initial study/mitigated negative declaration (IS/MND) was prepared and adopted by the City for the water treatment plant in December 2008. The plant would treat raw-water deliveries from the Lake Nacimiento Water Project, and would blend the treated surface water with groundwater from the Thunderbird Wells. The proposed treatment plant is designed as a 4-mgd facility for initial operation, expandable to 6 mgd to meet ultimate future demand (City of Paso Robles 2008). The primary water treatment plant components are as follows:

- raw-water facilities,
- treatment process,
- chemical facilities,

- treated water blending facilities, and
- operations building.

The Nacimiento raw-water supply would be delivered to the treatment plant via Turnout "T2" constructed as part of the Lake Nacimiento Water Project. The turnout would consist of flow metering and pressure reduction equipment and associated control panels on an above grade concrete pad. A multiple element static mixer would be installed downstream of Turnout T2 with potassium permanganate (KMnO4) and ozone injection points for oxidation and taste and odor control (City of Paso Robles 2008). Ozone would also serve as the primary disinfectant. The treatment process would consist of the following principal steps:

- pretreatment,
- membrane filtration,
- preplanning for future granular activated carbon treatment, and
- chlorine disinfection (backup system to ozone) (City of Paso Robles 2008).

The IS/MND prepared for the water treatment plant identified potentially significant impacts associated with air quality, biological resources, cultural resources, geology and soils, hydrology and water quality, noise and vibration, and transportation and circulation. The IS/MND concluded that with implementation of the recommended mitigation measures, the water treatment plant would not result in significant impacts on the environment. The treatment of up to an additional 219 afy purchased for the proposed project would likely require additional treatment capacity that was not analyzed in the IS/MND. However, expansion of treatment capacity would consist primarily of adding a new membrane component, or "rack," to the facility within the footprint of existing facilities (Alakel, pers. comm., 2010c). This would not be anticipated to result in any additional impacts on the environment that were not already analyzed in the IS/MND. CDCR would compensate the City of Paso Robles for incremental costs associated with adding CDCR-related capacity to the water treatment plant.

It should be noted that utilization of Lake Nacimiento water is contingent on several factors: (1) SLOCFCWCD must approve the purchase of the additional water rights for the City, (2) the Lake Nacimiento Water Project distribution facilities must be completed (currently anticipated for late summer 2010), and (3) the City must construct the water treatment facility (anticipated for 2014) and must design the facility with adequate capacity to serve the proposed CDCR facilities. If any of these factors are not fully implemented, CDCR would not be able to utilize Lake Nacimiento Water and one of the alternative water supply options (analyzed below) would need to be implemented. Note that if there is a delay in implementation of any of these factors, most notably the City's water treatment plant, project opening would need to be commensurately delayed if relying solely on this option. Currently the project is expected to be completed in 2013 and the water treatment plant in 2014, a year after project opening. These are projected timeframes, and changes could occur. To prevent delays in the proposed project, CDCR proposes to utilize the City's municipal water if Lake Nacimiento water supplies are <u>temporarily</u> unavailable because of a delay in operation of the City's water treatment facility. Although long-term utilization of the City's municipal water would result in significant impacts on groundwater (see discussion below under water supply "Option 2"), short-term utilization at the rates contemplated for the Master Reuse Plan (i.e., 219 afy) would not result in the substantial drawdown of local groundwater levels such that adverse impacts from drawdown (e.g., drying of wells) would occur.

Although the Master Reuse Plan would contribute to significant impacts identified in the EIR for the Lake Nacimiento Water Project, the County Board of Supervisors has fully considered these significant impacts and has adopted a statement of overriding considerations for the Lake Nacimiento Water Project. None of the impacts identified in the Nacimiento EIR would change as a result of the Master Reuse Plan, and they would occur with or without its implementation. Furthermore, it is assumed that the fees paid by CDCR for the purchase of Nacimiento water rights and the various connection fees paid to the City (i.e., hook-up fee for its water connection, meter fees) would constitute CDCR's fair share of the cost and would reimburse these agencies for the fair share for implementing the feasible mitigation measures identified in the Lake Nacimiento Water Project EIR. The Master Reuse Plan also would not increase the level of significance of any of the impacts described in the EIR. Furthermore, although the Master Reuse Plan would add up to 219 afy (equivalent to approximately 0.2

million gallons/day) to the design capacity of the City's planned water treatment plant, it would not result in additional significant environmental impacts, above and beyond those impacts identified in the December 2008 IS/MND (which were all determined to be less than significant with implementation of mitigation measures), especially because the plant is expandable from the currently planned 4 mgd to 6 mgd. Therefore, because the demand of the proposed project is equivalent to only 4% of the reserve capacity of the Lake Nacimiento Water Project, which is a reliable water source, and because CDCR would pay its fair share of the cost for treatment and mitigation, the Master Reuse Plan would result in ***less-than-significant*** *water supply impacts (Impact 4.12-3a).*

Water Supply Option 2. CDCR Utilizes City of Paso Robles Municipal Water (Including Groundwater)

City staff have indicated that it is the City's stated (but not written) policy to require new water users (not identified in the general plan) to purchase their own surface water rights. For this reason, Option 1 (the preferred option) includes purchase of surface water rights from Lake Nacimiento. However, if CDCR is unable to purchase its own surface water rights, then CDCR would implement Water Supply Option 2. Under this option, the Master Reuse Plan would be connected to the City's water distribution system and would use the City's municipal water supply (including groundwater) to meet projected water supply demands. City staff believes this is only a short-term option. Ultimately, in order to serve the project, the City would need its supply supplemented with Nacimiento water and treated at the City's planned water treatment plant. (Alakel, pers. comm. 2010e)

The analysis below considers two different data sources. As previously described, the City feels its 2005 UWMP is out of date; however, a revised UWMP is not available. Consequently, the analysis herein considers the project in the context of the UWMP, and then considers more recent data in the Uptown EIR.

UWMP Analysis. According to the 2005 UWMP, the City's water supply would exactly meet the demand in normal years. As shown in Tables 4.12-4 and 4.12-5 below, the 2005 UWMP also indicates that the City would maintain 100% of the normal year water supply in both single and multiple dry years and that there would be a surplus of 286–1,640 afy in dry years, because of implementation of voluntary water conservation measures (observed during previous drought years) and the ability to adjust groundwater pumping to meet demand. (In 2009, since the preparation of the UWMP, the City adopted a water conservation and contingency plan as part of its municipal code. The plan includes mandatory water conservation measures such as restriction of excessive runoff, overfilling pool, and spraying hard surfaces.) Therefore, the City would be able to meet project demands through additional groundwater pumping from the underlying groundwater basin. However, additional environmental effects related to groundwater pumping would occur, such as additional drawdown.

The UWMP is based on two critical assumptions: (1) up to 8,000 afy (4,000 afy near-term and 4,000 afy long term) of Lake Nacimiento water would be available by 2025 (the Uptown EIR assumes the same 4,000 afy short-term water from Nacimiento, but only indicates that additional water from Nacimiento *may* be available in 2025 without specifying the amount).; and (2) a water recycling program would be in place by 2025 to provide 944 afy (the Uptown EIR assumes 2,000 afy). City public works staff indicated that, although the City currently has rights to the first 4,000 afy of supplemental Lake Nacimiento water, the City anticipates only requesting an additional 1,400 afy, as opposed to the 4,000 afy evaluated in the UWMP (Alakel, pers. comm., 2010b).

In 2009, the 96,781 acre-feet of groundwater outflow from the Paso Robles Groundwater Basin was 99% of the perennial yield (97,700), a 5% increase from 2004 (SLO County 2010a:11). The basin as a whole in 2009 was not in overdraft (groundwater extraction rate surpasses recharge rate); however, considering the trend of decline, overdraft conditions may exist at the time the project begins operation. As described above under "Existing Conditions," the City draws water from the Estrella Subarea of the Paso Robles Groundwater Basin. The 2010 *Overview of the Estrella Subarea* indicates that the subarea groundwater levels have been rapidly declining since 1997, as much as 70 feet in some locations (SLO County 2010a:10). Municipal use of Lake Nacimiento water at currently committed rates (4,000 afy) would reduce the rate of groundwater storage declines. The rate of groundwater storage decline without Lake Nacimiento supply was simulated to be 3,800 afy and with Lake

Table 4.12-4 City of Paso Robles 2005 UWMP Supply and Demand for Normal and Single Dry Years												
	2010			2015			2020			2025		
	Normal Year	Single Dry Year[1]	% Projected Normal	Normal Year	Single Dry Year[2]	% Projected Normal	Normal Year	Single Dry Year[2]	% Projected Normal	Normal Year	Single Dry Year[2]	% Projected Normal
Supply	9,530	9,530	100	11,830	11,830	100	14,100	14,100	100	16,400	16,400	100
Demand	9,530	9,244	97	11,830	11,475	97	14,100	13,677	97	16,400	15,908	97
Shortage	0	0	0	0	0	0	0	0	0	0	0	0
Surplus	0	286	3	0	355	3	0	423	3	0	492	3

Notes: 2005 UWMP = *2005 Urban Water Management Plan*

[1] Source of water supply is 100% groundwater.

[2] Source of water supply is 4,000 acre-feet per year Lake Nacimiento water and groundwater.

Source: Data from City of Paso Robles 2008, compiled by Ascent Environmental in 2010

Table 4.12-5 City of Paso Robles UWMP Supply and Demand for Multiple Dry Years															
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Supply	9,990	10,450	10,910	11,370	11,830	12,284	12,738	13,192	13,646	14,100	14,560	15,020	15,480	15,940	16,400
Demand	8,991	9,405	9,819	10,233	10,647	11,056	11,464	11,873	12,281	12,690	13,104	13,518	13,932	14,346	14,760
Shortage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Surplus	999	1,045	1,091	1,137	1,183	1,228	1,274	1,319	1,365	1,410	1,456	1,502	1,548	1,594	1,640

Source: Data from City of Paso Robles 2008, compiled by Ascent Environmental in 2010

Nacimiento supply would be reduced to 1,200 afy. The 2005 UWMP states that it is reasonable to presume that use of additional Lake Nacimiento water supply (on the order of 1,200 afy or more) would halt the storage declines and allow recovery under municipal and agricultural buildout conditions (City of Paso Robles 2008:21). Therefore, if the City acquires the additional 1,400 afy above its currently committed rates, the City would no longer contribute to the existing chronic drawdown of groundwater in the area.

However, the additional up to 219 afy of water demand generated by the proposed project was not considered in the UWMP, and therefore would increase the amount of additional Lake Nacimiento water needed to halt local groundwater decline. It should also be noted that, although the City intends to purchase an additional 1,400 afy of Lake Nacimiento water, it is not guaranteed that the City will acquire the additional water rights. For these reasons, the City may continue to contribute to the decline of the local groundwater table.

Uptown EIR Analysis. As stated in the Uptown EIR, cumulative development in the City of Paso Robles, including the Uptown project, would result in increased demand for water and water treatment capacity. The City's water master plan forecasts total water demand at general plan buildout of 4,973 million gallons per year (mgy), or approximately 15,260 afy through 2025. (This total is similar to the projected demand of 14,760 afy shown in the UWMP in 2025.) SB 7, passed in 2009, creates a framework for future planning and actions by urban and agricultural water suppliers to reduce California's water use. This bill requires the development of agricultural water management plans and requires urban water agencies to reduce statewide per capita water consumption 20 percent by 2020.The demand estimate described herein does not include the state-mandated 20 percent reduction in water use, which would reduce buildout demand to an estimated 12,186 afy. The proposed

project would increase water use by 219 afy, to an estimated cumulative total of 12,405 afy, which is 405 afy in excess of anticipated supply. This excess would likely need to be made up with groundwater pumping, if the entitlement of additional water from Lake Nacimiento is not available for the project. As concluded above, this would increase groundwater pumping in a basin with potential overdraft, which is a significant impact. The data in the Uptown EIR may differ from the UWMP, but the conclusions regarding project significance are the same.

Although the City's 2005 UWMP indicates that sufficient water supplies are available to serve the Master Reuse Plan under Water Supply Option 2, the 2005 UWMP is based on two assumptions that are no longer valid: availability of 8,000 afy of Lake Nacimiento water and use of a sufficient amount of recycled water. The 2005 UWMP indicates that if these water sources are not available, the supply would be made up by continued use of groundwater, which would continue the decline of groundwater levels in the Estrella subarea and the larger Paso Robles Groundwater Basin. The Uptown EIR concludes similarly. Although the currently committed 4,000 afy of Nacimiento water would reduce the groundwater decline,, because the basin is nearing overdraft conditions and these conditions are projected to exist when the project begins operation, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in potential overdraft. This impact would be ***significant*** *(Impact 4.12-3b).*

Water Supply Option 3. CDCR Continues Use of On-site Wells

This option would be considered only if purchase of Lake Nacimiento water rights was found to be infeasible and if the City declined CDCR's subsequent request for municipal water (including groundwater). Unlike the previous two options, under Option 3, the Master Reuse Plan would use on-site wells to meet the potable-water demand of the proposed facilities. This may include increasing well depth and capacity, as well as installing on-site water treatment and water quality monitoring mechanisms, among other potential upgrades. Additional storage and on-site distribution facilities may be required. (Note that construction of these on-site upgrades would not result in any new impacts on the environment or increase the severity of impacts identified in the other sections of this EIR because these facilities would be constructed within the developed footprint on the CDCR property.)

As mentioned in above under "Existing Conditions." groundwater quality in the subarea is generally good to moderate for municipal use (SLO County 2010a:12). It is anticipated that existing wells would provide water quality that would provide quality drinking after some minor treatment.

The Master Reuse Plan facilities would pump approximately 219 afy from the Estrella Subarea of the water basin. The UWMP states, "at current rates of municipal and agricultural pumping, local groundwater already is subject to chronic declines; if agricultural pumping also increases, a real risk of overdraft exists" (City of Paso Robles 2008:22). The *2010 Overview of the Estrella Subarea* indicates that the subarea groundwater levels have been rapidly declining since 1997, as much as 100 feet in some locations (SLO County 2010a:10). While the City has plans to reduce and possibly halt the rate of groundwater decline through the importation of surface water from Lake Nacimiento, further groundwater pumping beyond what is planned for in the 2005 UWMP could lead to the continued decline of groundwater levels in the Estrella Subarea and the larger Paso Robles Groundwater Basin, which is projected to be in potential overdraft by the time the Master Reuse Plan begins operation.

Once the City begins operating the water treatment plant (anticipated for 2013) and processing its currently committed 4,000 afy of Lake Nacimiento water, the local groundwater decline would occur more slowly. However, the additional 219 afy of groundwater pumping could result in further groundwater level declines within a basin projected to be in overdraft at the time the Master Reuse Plan is operational.

Pumping additional groundwater to serve the Master Reuse Plan would contribute to the current chronic decline of groundwater in the area. Although use of the currently committed 4,000 afy of Nacimiento water would reduce the local groundwater decline by 59%, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in potential overdraft. This impact would be ***significant*** *(Impact 4.12-3c).*

PROPOSED MITIGATION MEASURES

Less-Than-Significant Impacts

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.12-3a. Impacts on Water Supplies and Facilities. Option 1

Significant and Unavoidable Impacts

The following impacts related to water supply were identified as significant. Mitigation identified below would substantially reduce the utilities and service system effects for all significant impacts listed below, but not to a less-than-significant level.

Impact 4.12-3b and c. Impacts on Water Supplies and Facilities. Option 2 and Option 3

The following mitigation measure will be implemented by CDCR:

Before construction, CDCR will prepare landscape plans consistent with the requirements of the City's water efficient landscape ordinance, except where requirements could adversely affect security or public safety. The City would have no approval authority over the landscape plans, although CDCR intends to consult with the City of design and planting palettes.

Implementation of this mitigation measure would reduce project water demand associated with landscaping and would avoid conflicts with the City's adopted ordinance. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because it is uncertain whether the City would be able to halt its current contribution to local declines in groundwater levels, any project contribution to this potential cumulative impact would be considered significant, even after reducing water demand to the extent feasible. This impact would remain **significant and unavoidable**.

4.12.3 SOLID WASTE

EXISTING CONDITIONS

The City of Paso Robles owns the Paso Robles Landfill and franchises for solid waste collection and recycling services within the city limits. The Paso Robles Landfill is a permitted Class III solid waste facility. According to CalRecycle, the Paso Robles Landfill has (as of 2007) a remaining capacity of 5,327,500 cubic yards (cy), which, using EPA's conversion for volume to weight for landfill municipal waste (EPA 2008), equals between 4 billion and 6.7 billion pounds of solid waste.

REGULATORY BACKGROUND

Federal Plans, Policies, Regulations, and Laws

No federal plans, policies, regulations, or laws related to solid waste are applicable to the proposed project.

State Plans, Policies, Regulations, and Laws

The California Waste Management Act (AB 939) mandates the amount of solid waste entering existing landfills and to reuse solid waste through recycling efforts. AB 939 requires every city and county in the state to prepare as a part of its solid waste management plan a Source Reduction and Recycling Element (SRRE) that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by the year 1995 and 50% by the

year 2000. The purpose of AB 939 is to "reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible."

Local Plans, Policies, Regulations, and Ordinances

No local plans, policies, regulations, or ordinances related to solid waste are applicable to the proposed project.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on the existing solid waste collection and disposal system is considered significant if implementation of the proposed project would do either of the following:

- not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- not comply with federal, state, and local statutes and regulations related to solid waste.

Project Impacts

Impact 4.12-4: Impacts on Solid Waste Facilities

Based on CDCR estimates, the average solid waste generation rate is 8.5 pounds per inmate per day. The Master Reuse Plan would generate a total to 13,855 pounds of solid waste per day (8.5 pounds multiplied by 1,630 inmates). After 15 years, the project would generate approximately 76 million pounds of solid waste, which is between 1.1% and 1.8% of the available capacity of the Paso Robles Landfill. This would not consume a substantial amount of the landfill's available capacity and would not result in the need to expand or construct new landfill facilities.

Implementation of the Master Reuse Plan would not substantially deplete remaining landfill capacity and would not result in the need to expand or construct new solid waste disposal facilities. CDCR would comply with all federal, state, and local statutes and regulations related to solid waste; therefore, this impact would be ***less than significant*** *(Impact 4.12-4).*

PROPOSED MITIGATION MEASURES

Less-than-Significant Impacts

All of the Master Reuse Plan's impacts related to solid waste were identified as less than significant. No mitigation measures are necessary.

4.12.4 ELECTRICITY AND NATURAL GAS

EXISTING CONDITIONS

Regional Setting

Electrical utility service is provided to the project vicinity by Pacific Gas & Electric Company (PG&E). PG&E provides electric service to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California, stretching from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. PG&E maintains 141,215 circuit miles of electric distribution lines and 18,616 circuit miles of interconnected transmission lines (PG&E 2010).

Natural gas service is provided to the CDCR property by Southern California Gas Company (SoCal Gas). SoCal Gas provides natural gas service to 20.5 million consumers in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border (SoCal Gas 2010).

Local Setting

CDCR would connect to existing PG&E transmission lines at the north side of the CDCR property. The transmission lines currently have a capacity of 4 megawatts (MW). PG&E operates a substation on the southern side of the City with a capacity of approximately 3 MW (Spratt, pers. comm., 2010).

CDCR would connect to an existing SoCal Gas line in Airport Road.

REGULATORY BACKGROUND

Federal Plans, Policies, Regulations, and Laws

No federal plans, policies, regulations, or laws related to electricity and natural gas are applicable to the proposed project.

State Plans, Policies, Regulations, and Laws

Title 24, Part 6 of the California Building Code establishes building energy efficiency standards for new construction (including requirements for new buildings, additions, alterations, nonresidential buildings, and repairs). Energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. New standards were adopted in 2005 as mandated by AB 970 to reduce California's electricity demand. The new standards went into effect on October 1, 2005. The 2005 building energy efficiency standards were developed in response to AB 970 (Statutes of 2000) and Senate Bill 5X (Statutes of 2001; outdoor lighting building standards). The updated standards were adopted by the California Energy Commission in November 2003 (California Energy Commission 2008).

Local Plans, Policies, Regulations, and Ordinances

No local plans, policies, regulations, or ordinances related to electricity and natural gas are applicable to the proposed project.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on electricity or natural gas is considered significant if implementation of the proposed project would do either of the following:

- result in an increase in demand for electricity or natural gas service that is substantial in relation to the existing demands; or
- require or result in the construction of new electrical or gas facilities, the construction of which could cause significant environmental effects.

Project Impacts

Impact 4.12-5: Impact on Electrical Facilities

Because the proposed facilities for the Master Reuse Plan are in the early planning stages, specific electrical demand estimates are not known. However, based on similar CDCR facilities in similar climates, a conservative demand factor of 1.5 MW per 1,000 beds was used to estimate the projected demands. The Master Reuse Plan would result in a demand for 2.5 MW of electricity.

PG&E has indicated that its overhead lines in the area have an available capacity of approximately 4 MW, and its substation (PR 1107) has an available capacity of approximately 3.5 MW (Spratt, pers. comm., 2010). Therefore, PG&E has adequate capacity in its local facilities to serve the Master Reuse Plan.

Implementation of the Master Reuse Plan would increase demand for electricity; however these demands would not exceed existing available electrical supplies, and the construction of new or expanded facilities that could result in impacts on the environment would not be required. Therefore, the Master Reuse Plan would have a ***less-than-significant*** *impact on electricity services (Impact 4.12-5).*

Impact 4.12-6: Impacts on Natural Gas Facilities

Because the proposed facilities for the project are in the early planning stages, specific natural gas demand estimates are not known. However, based on similar CDCR facilities in similar climates, a conservative demand factor of 30 cubic feet per hour per inmate bed was used to estimate the projected demands. Therefore, it is conservatively estimated that it would be able to serve the project and no additional upgrades to existing facilities would be rezoned.[1] The project would connect to existing gas facilities on Airport Road. The project would result in a demand for 48,900 cubic feet per hour of natural gas. Staff of SoCal Gas has indicated that to determine capacity of the gas line required to serve the proposed facilities, a detailed list of all the project's gas-fired equipment (including size and running time) must be provided. This information is not available at this point in the planning process. Therefore, because the demand generated by the proposed facility is only an estimate and the capacity of the gas line is currently unknown, the project's gas demand volume could exceed the existing pipeline's capacity. This could require upsizing of the existing gas pipeline in Airport Road. It should be noted that upsizing of a pipeline within a paved right-of-way would not likely result in any new significant environmental impacts that have not been evaluated throughout this DEIR.

Implementation of the Master Reuse Plan would increase the demand for gas. Because the proposed project is in the early planning stages, the specific demand generated by the project cannot be determined with certainty, and, SoCal Gas is not available to provide data on the available capacity of their existing gas pipeline in Airport Road. Therefore, the project has the potential to exceed the capacity of this pipeline and a ***potentially significant*** *impact could result (Impact 4.12-6).*

PROPOSED MITIGATION MEASURES

Less-Than-Significant Impacts

The following impact was identified as less than significant, and therefore no mitigation is required:

Impact 4.12-5: Electricity Service Capacity

Significant Impacts that Can Be Mitigated to a Less-Than-Significant Level

Mitigation Measure 4.12-6: Impacts on Natural Gas Facilities

[1] Spencer, Bruce. 2010. Engineer. Southern California Gas. Monterey Park, CA., telephone conversation with Vince Hayes of VANIR regarding the Estrella project

Before initiating construction, CDCR will provide SoCal Gas with a detailed list of gas-fired equipment to be used during operation. The list will include the size and running time of each piece of equipment. CDCR will coordinate with SoCal Gas regarding the capacity of the existing gas pipeline within Airport Road. If SoCal Gas determines that the existing line has capacity, or that the capacity can be increased by other means (i.e., increasing line pressure), then no further mitigation is necessary. If a larger gas line is determined to be necessary to accommodate the project's gas demand, CDCR will either install the new gas line, or pay appropriate fees to SoCal gas for installation of a new gas line.

Significant Impacts That Would Remain Significant and Unavoidable

No electricity or natural gas impacts were identified as significant and unavoidable.

4.13 VISUAL RESOURCES

This section describes the existing visual characteristics of the CDCR property and evaluates the visual effects of the Paso Robles Property Master Reuse Plan (Master Reuse Plan) on its surroundings. This visual impact analysis considers existing scenic resources and the potential visibility of the site from surrounding areas, including both the physical dimensions of the facility and facility lighting and glare.

Visual simulations of the Master Reuse Plan were prepared for seven viewpoints (Exhibits 4.13-1 through 4.13-8). The methodology used to prepare the visual simulations is described in Appendix B. This visual resource analysis is based on field surveys of the CDCR property and surrounding areas and on interpretation, analysis, and comparison of existing views and simulated views of the property in relation to the surrounding area.

4.13.1 EXISTING CONDITIONS

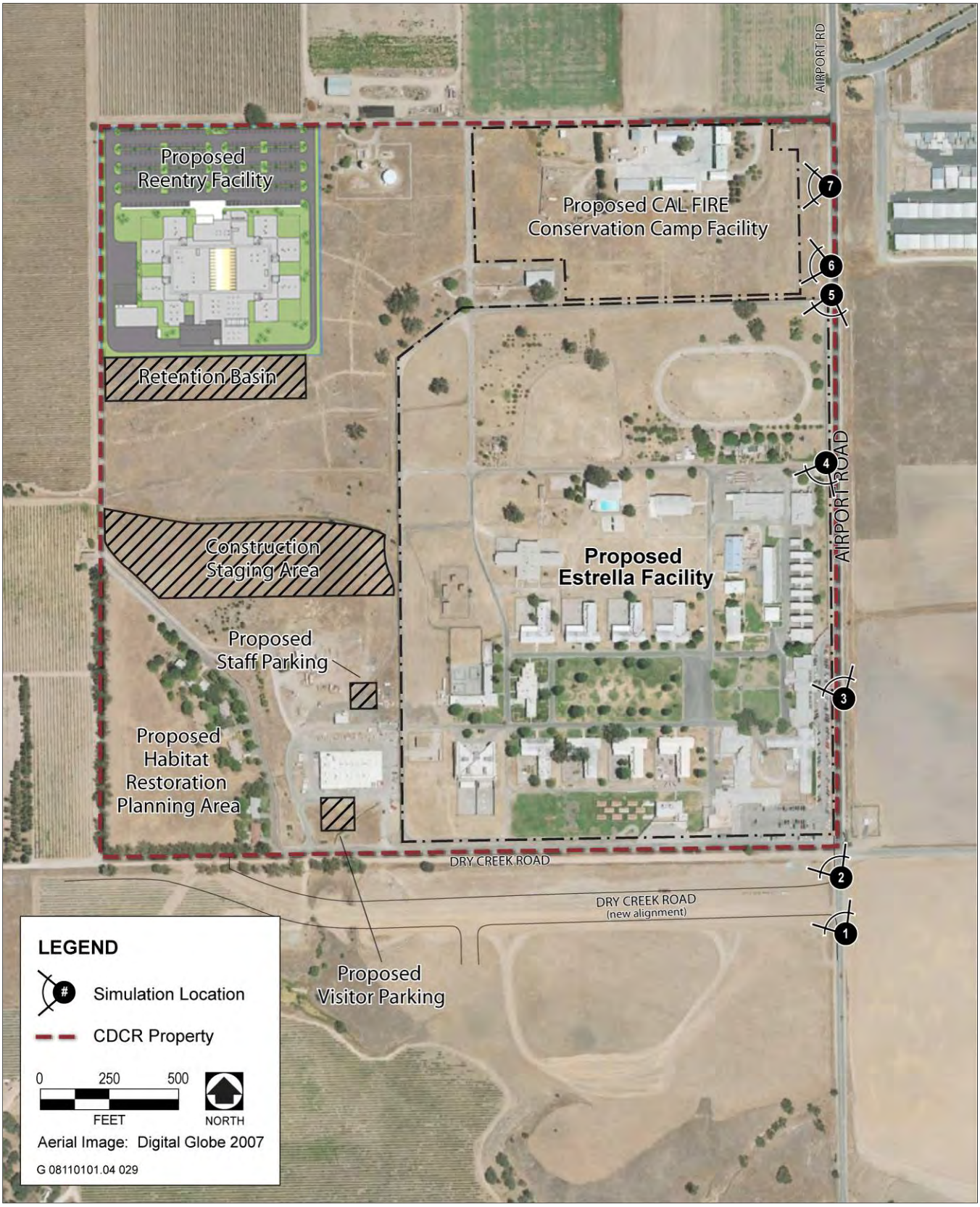
VISUAL SETTING

The CDCR property is located in the north-central portion of San Luis Obispo County within the city of Paso Robles. The parcel is approximately 3 miles northeast of central Paso Robles and approximately 30 miles north of the city of San Luis Obispo (see Exhibit 3-1 of this DEIR). The CDCR property is bordered on three sides by land that has been historically used for agriculture (north, west, and south of the site) and on the east by a regional airport. Recently, the City of Paso Robles (City) realigned Dry Creek Road just south of the CDCR property; the realigned Dry Creek Road is currently surrounded by undeveloped/graded land and vineyard land uses. The Paso Robles Municipal Airport is located directly east/northeast of the CDCR property across Airport Road (see Exhibit 3-2 of this DEIR). The project area is generally recognized as an increasingly popular location for business park developments because of its close proximity to the airport and U.S. Highway 101.

The CDCR property is located along Airport Road, an important visual amenity within Paso Robles. The City's general plan identifies Airport Road as both a "Gateway to the City" and a "Visual Corridor." Along Airport Road, existing views of the CDCR property are dominated by buildings associated with CAL FIRE operations facilities and the former Division of Juvenile Justice (DJJ) facility. Current buildings on the site are visually unremarkable, consistent with their institutional and utilitarian purpose, and they do not visually dominate the viewshed. Existing buildings are unattractive and visually unappealing. The visual setting of the CDCR property consists of open undeveloped areas, security fencing, staff residences, and existing buildings and structures associated with current CAL FIRE and former DJJ operations.

The closest readily accessible public view of the site is from cars traveling north and south along Airport Road. See Exhibits 4.13-2 through 4.13-8. Traveling south to north, the site appears on the left side of the roadway; from here the view is of low-lying buildings, almost school-like in appearance. As one drives past the facility, a security fence dominates the view. As one travels north to south, the security fence appears to encroach on the edge of the roadway. From both directions, buildings can be seen through the fence (the buildings are institutional in nature), but one has to turn one's head at a sharp angle (90 degrees) from the road to see much through the fence.

The former DJJ facility opened in 1947, experiencing a number of expansions and additions up through its closure and deactivation in 2008. The existing on-site buildings associated with the former DJJ facility are generally red brick exteriors with white (energy efficient) roofs and green eaves. These buildings are unattractive. Buildings associated with CAL FIRE operations are primarily made up of one-story pastel green or white warehouse buildings. These buildings also are institutional in character, although somewhat more visually compatible with a rural setting (see Exhibits 4.13-7a and 4.13-8a). The CDCR property is set against a visual backdrop of adjacent vineyards and other agricultural land uses. In general, the less developed areas are located in the northwestern and western portions of the site, and development increases toward the southeast portion of the site. Airport Road is located along the eastern border of the CDCR property with the Paso Robles Municipal Airport just east of Airport Road.



Source: Data compiled by AECOM in 2010

Visual Simulation Key with Project Overlay **Exhibit 4.13-1**

Existing View from Airport Road looking Northwest at the CDCR property (4.13-2a)

Simulated View (4.13-2b)

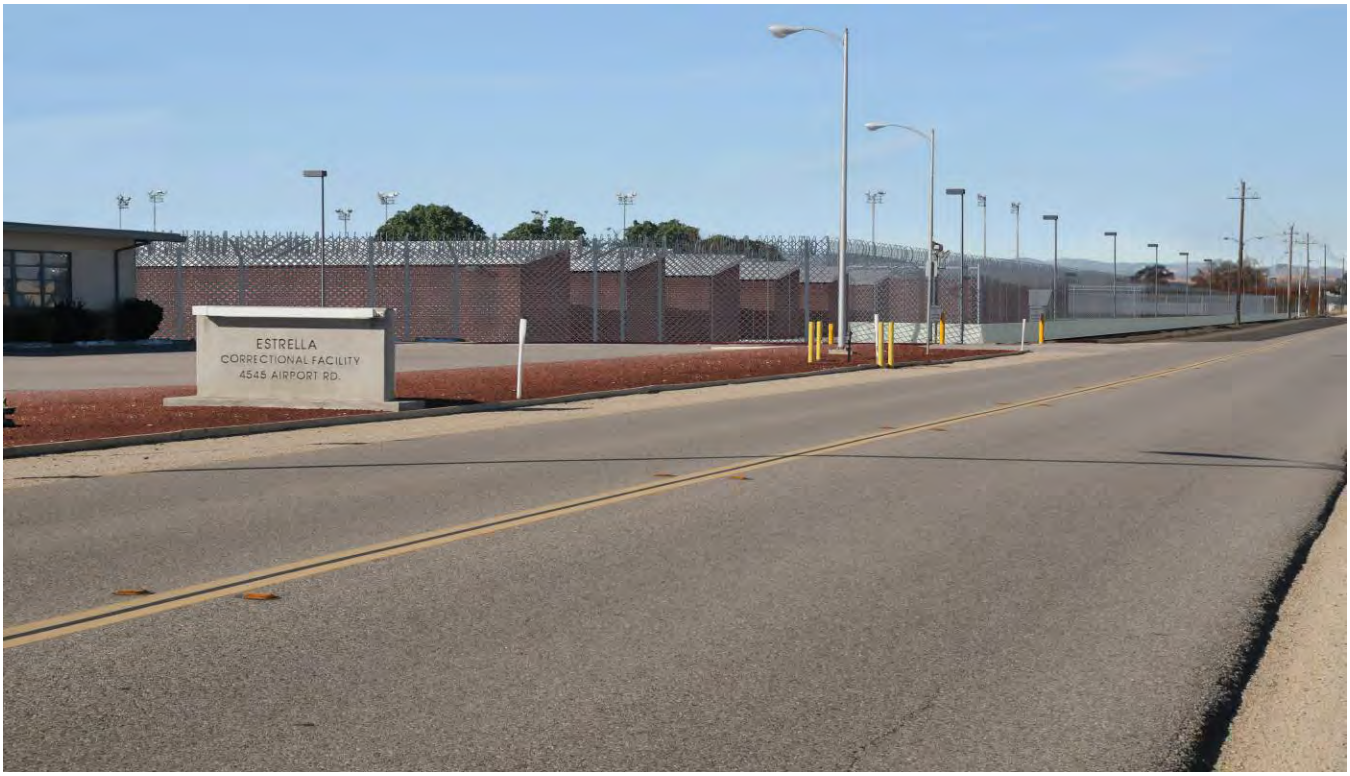
Viewpoint 1, Airport Road (South) **Exhibit 4.13-2**

Existing View from Airport Road looking Northwest at the CDCR property (4.13-3a)

Simulated View (4.13-3b)

Viewpoint 2, Airport Road (South of Dry Creek Road) **Exhibit 4.13-3**

Existing View from Airport Road looking Northwest at the CDCR property (4.13-4a)



Simulated View (4.13-4b)

Viewpoint 3 (East of Administration Building) **Exhibit 4.13-4**

Existing View from Airport Road looking Southwest at the CDCR property (4.13-5a)

Simulated View (4.13-5b)

Viewpoint 4, Airport Road (Northeast of Library/Vocational School Building) **Exhibit 4.13-5**

Existing View from Airport Road looking Southwest at the CDCR property (4.13-6a)

Simulated View (4.13-6b)

Viewpoint 5, Airport Road (Northeast of Athletic Field) **Exhibit 4.13-6**

Existing View from Airport Road looking West at the CDCR property (4.13-7a)

Simulated View (4.13-7b)

Viewpoint 6, Airport Road (East of Undeveloped Portion of Site) **Exhibit 4.13-7**

Existing View from Airport Road looking West at the CDCR property (4.13-8a)

Simulated View (4.13-8b)

Viewpoint 7, Airport Road (Southeast of existing CAL FIRE operations) **Exhibit 4.13-8**

Public views of on-site buildings from the north are generally limited; however, the property can be seen from a nearby cattle operation and a few rural residences. Public views of the CDCR property are generally located in the distant background because of the presence of several acres of intervening vineyards. Foreground views (i.e., close-range views) of the CDCR property are only available from the stretch of new Dry Creek Road to the south and the adjacent stretch of Airport Road to the east.

LIGHT AND SKYGLOW

The terms "glare" and "skyglow" are used in this impact analysis to describe the visual effects of lighting. For the purposes of this impact analysis, glare is considered to be direct exposure to bright lights and skyglow is a glow that extends beyond the light source and dominates or partially dominates views above the horizon at night.

Because the former DJJ facility no longer houses inmates, the facility is minimally lit during nighttime hours. Some CAL FIRE operations on the northeastern portion of the site continue to operate 24 hours per day, resulting in some minor nighttime illumination associated with building mounted security lighting. Although the CDCR property is surrounded mostly by agricultural land, the property's existing nighttime lighting sources are not a substantial light source in the local viewshed. Other nighttime lighting sources in the vicinity include the Paso Robles Municipal Airport and industrial/commercial uses just north/northeast of the site.

4.13.2 REGULATORY BACKGROUND

FEDERAL AND STATE PLANS, POLICIES, REGULATIONS, AND LAWS

No federal or state plans, policies, regulations, or laws are applicable to the proposed project.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of El Paso De Robles General Plan 2003

Although the project would not be subject to the local policies of the City's general plan, the CDCR property is located adjacent to Airport Road, an important visual resource within Paso Robles that is identified in Table C-1 and Figure C-3 of the general plan as both a "Gateway to the City" and a "Visual Corridor." The Conservation Element contains the following relevant visual policy:

- **Policy C-5A:** Visual Gateways and Landmarks. Identify important visual resources: gateways, corridors, major arterials, natural/open space areas, as shown on Table C-1 and Figure C-3.

The following relevant visual resource terms are defined in Table C-1, "Important Visual Resources," of the general plan as follows:

Gateways to the City:

- May be marked with entrance monument signs.
- Limit range of land use to preclude those commercial and industrial uses with outside processes and storage.
- Development shall be designed to make a positive visual impression (in terms of design/architecture and landscaping) and incorporate/preserve natural features.
- Billboards shall be limited in number, shall be located to preserve views of natural features.

Visual Corridors

- Development shall be designed to make a positive visual impression and incorporate/preserve natural features.
- Billboards shall be limited in number, shall be located to preserve views of natural features.
- Architectural design of new development on Spring Street shall be compatible with, and incorporate features identified in adopted design guidelines.

4.13.3 ENVIRONMENTAL IMPACTS OF THE PROJECT

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a visual resources impact is considered significant if implementation of the proposed project would do any of the following:

- have a substantial adverse affect on a scenic vista;
- substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; and/or
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

METHODOLOGY

The following visual analysis is organized by seven viewpoints and describes the daytime and nighttime visual changes that would occur with implementation of the Master Reuse Plan. The intent of the following discussion is to objectively describe how views of the site would change from various viewpoints, particularly along Airport Road. This analysis does not attempt to document how views of the site would change from every possible viewpoint in the local area. In reality, there are infinite viewpoints from which this (and any) project can be seen. The analysis uses key, representative viewpoints generally available to the public. Further, because the security fence for the project, especially the Estrella Adult Correctional Facility (Estrella Facility), would be close to the travel lanes on Airport Road, views are shown from more oblique angles. This is because the natural inclination of a driver is to view the road ahead, not look 90 degrees to the right or left, especially in more constrained conditions (2 lane, undivided road with a fence on one side and vehicles approaching on the other side). Thus, views generally represent what a driver would generally see, while paying attention to the road.

This visual resources analysis is based on field surveys and review of existing and simulated views of the site taken from seven different viewpoints along Airport Road. No other well-traveled public roadways surround the CDCR property or offer publicly accessible views of the CDCR property. For the analysis that follows, each simulated photograph includes all three project components (i.e., Estrella, CAL FIRE, and reentry facilities) and was compared to the photograph depicting existing views of the site from the selected viewpoint. Existing daytime views and simulated daytime views of project development conditions from various viewpoints along Airport Road are presented in Exhibits 4.13-2 through 4.13-8. The visual comparison included identification of how the Master Reuse Plan would change foreground, middle-ground, and background views of the CDCR property and surrounding vicinity, and how the Master Reuse Plan would affect views of existing facilities at the CDCR property. In addition, a discussion of how the visual character of the proposed buildings would blend with existing on-site buildings is also provided. This comparison is then summarized for each viewpoint.

The Master Reuse Plan would introduce additional buildings with similar design characteristics to the existing buildings on the CDCR property. The Estrella Facility would result in the construction of seven new buildings (approximately 25 feet tall, similar to existing adjacent buildings), two guard towers (approximately 35 feet tall above grade), installation of five additional perimeter pole-mounted lights along the eastern boundary (approximately 35 feet tall), and construction of a double-perimeter lethal electrified fence (approximately 12 feet tall). In addition, a 1,200-foot long concrete wall or other similar traffic barrier (e.g., bollards, masonry wall) is proposed just west of Airport Road and east of the lethal electrified fence. Construction of the CAL FIRE Conservation Camp facilities would result in the addition of 10 new single-story buildings (i.e., heights would range from 17 to 30 feet at the highest point). Proposed CAL FIRE buildings would be similar in height, color, and architectural design to existing on-site buildings. The proposed reentry facility would comprise an inmate housing complex with related programming/support services (approximately 32 feet tall at its highest point) and a free-standing support services warehouse adjacent to the main complex. The reentry facility would have more modern design characteristics than the other proposed project components and would be constructed in the undeveloped northwest corner of the site.

Project Impacts

Impact 4.13-1: Potential for Damage to Scenic Resources

The CDCR property is not visible from a designated state scenic highway. Therefore, implementation of the Master Reuse Plan would not have an adverse visual impact on any such facilities. No visually significant scenic resources (i.e., trees or rock outcroppings) are located on the CDCR property or in the project vicinity.

The Master Reuse Plan would not be visible from a state-designated scenic highway and the CDCR property does not support any visually significant scenic resources (i.e., trees and rock outcroppings). As a result, implementation of the Master Reuse Plan would not have a substantial adverse effect on any such resources. This impact would be ***less than significant*** *(Impact 4.13-1).*

Impact 4.13-2: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

Existing daytime views and simulated daytime views of the Master Reuse Plan facilities from each of the seven representative viewpoints are presented in Exhibits 4.13-2 through 4.13-8.

The Master Reuse Plan would introduce new buildings, structures, and an electrified fence to the eastern half of the CDCR property. In general, the developed footprint of the Estrella Facility would appear denser because of the increased number of buildings and additional fencing, along with razor wire on top of the fencing. Similarly, the CAL FIRE site would also have a more developed and dense appearance because of the increased number of buildings and their closer proximity to Airport Road. The reentry facility would be located in the northwest corner (interior portion) of the CDCR property. Because of its distance from Airport Road, views of the site are not available from several of the representative viewpoints, including viewpoints 1–5, because of intervening topography and buildings. The following evaluates visual changes that would occur from implementation of the Master Reuse Plan from the seven representative viewpoints.

Viewpoint 1: Airport Road (South)

From the Airport Road (South) viewpoint (Exhibit 4.13-2b), the most noticeable change to the visual setting under the Master Reuse Plan would be the screening of existing on-site buildings because of the perimeter fences that would surround all but two existing buildings. Currently, the buildings on-site are visually prominent in the middleground and appear vivid against the surrounding setting because of their red exteriors and white roofs. With implementation of the Master Reuse Plan, the perimeter fence would screen prominent views of the on-site buildings to some extent. However, the fence itself becomes the prominent visual feature of the site. The gray color of the fence would result in a more industrial/institutional appearance, as at other CDCR correctional facilities. Although some trees would be removed from the Estrella site for safety and security reasons, the

removal of these trees would not result in substantial changes to the background viewshed. None of the proposed new buildings at the Estrella Facility would be visible from this viewpoint because they would be blocked by existing buildings and the perimeter fence. Further, because of their distant location on the CDCR property, and their positioning behind existing buildings from this viewpoint, views of the proposed reentry and CAL FIRE facilities would not be available. Overall, views of the Estrella site from this viewpoint would continue to maintain a highly developed appearance. Although views would change from primarily building frontages to a fence line, this change would not be substantial in relation to the existing visual character of the site from this viewpoint.

Implementation of the Master Reuse Plan would result in changes to views of the site from Viewpoint 1. Although the proposed reentry and CAL FIRE facilities would not be visible from this location, the Estrella Facility would dominate middle-ground views and would primarily consist of buildings screened/muted by the electrified fence. Although views would change from primarily building frontages to a fence line, this change would not be substantial in relation to the existing visual character of the site from this viewpoint. This impact would be ***less than significant*** *(Impact 4.13-2a).*

Viewpoint 2: Airport Road (South of Dry Creek Road)

From the Airport Road (South of Dry Creek Road) viewpoint (Exhibit 4.13-3b), which is located slightly closer to CDCR property than viewpoint 1, the changes that would occur in the viewshed under the Master Reuse Plan would be similar to the changes that would occur from Viewpoint 1. The most prominent change would be the removal of some foreground buildings and shielding of the remaining foreground buildings with the perimeter fence. Views of the site from this location would continue to be dominated by existing buildings and cyclone fencing. Background views of the CDCR property along Airport Road show that the Master Reuse Plan would result in the removal of several on-site trees and the slight intensification of cyclone fencing. The roof of the new guard tower is barely visible in the background along Airport Road. Views of the proposed reentry and CAL FIRE facilities would not be available because they would be blocked by existing on-site buildings. Overall, the Master Reuse Plan would result in minimal changes to views of the site from this viewpoint.

Implementation of the Master Reuse Plan would result in minor changes to views of the site from Viewpoint 2. The reentry and CAL FIRE facilities would not be visible from this location because views would be blocked by existing on-site buildings. Buildings associated with the Estrella Facility currently dominate and would continue to dominate foreground views. The Master Reuse Plan would generally screen some existing buildings and remove others. This impact would be ***less than significant*** *(Impact 4.13-2b).*

Viewpoint 3: Airport Road (East of Administration Building)

Foreground views of the CDCR property from the Airport Road (East of Administration Building) viewpoint (Exhibit 4.13-4b) currently consist of the administration building and existing classroom facilities lightly shielded by the cyclone security fence. In the middleground, an on-site open space area is visible with additional classroom facilities barely perceptible in the background behind on-site trees. Views along Airport Road consist of cyclone fencing. With implementation of the Master Reuse Plan, the existing classroom facilities would be visible in the foreground, but shielded by more cyclone fencing along Airport Road. Some existing buildings between the administrative building and classrooms would be removed and would appear to organize and reduce the density of on-site buildings. In the middleground, views of the site would change from a developed landscaped setting to a more institutional/warehouse setting. Additional buildings would be visible and ornamental/trees would be removed from the site. Though changed, views of the site would continue to be of a correctional institution and would generally be of the same development intensity as existing structures at the CDCR property. Views of the proposed reentry and CAL FIRE facilities would not be available and would be blocked by on-site building and perimeter fencing. Overall, views of the CDCR property from Viewpoint 3 would not substantially change under the Master Reuse Plan because existing buildings and fencing would continue to dominate views from this location as compared to existing conditions.

Implementation of the Master Reuse Plan would result in minor changes to views of the site from Viewpoint 3; however, views would continue to be of a correctional institution and would generally be of the same development intensity as existing structures at the CDCR property. Views of the proposed reentry and CAL FIRE facilities would not be available and would be blocked by on-site building and perimeter fencing. This impact would be ***less than significant*** *(Impact 4.13-2c).*

Viewpoint 4: Airport Road (Northeast of Library/Vocational School Building)

Foreground views from the Airport Road (Northeast of Library/Vocational School Building) viewpoint (Exhibit 4.13-5b) currently consist of Airport Road to the south, cyclone fencing, trees, and existing dormitory and classroom facilities at the former DJJ facility. Middle-ground and background views from this viewpoint generally consist of the same features but at more distant locations. The reentry and CAL FIRE facilities would not be visible because of the south-facing angle of this viewpoint. With implementation of the Master Reuse Plan, views of the CDCR property would consist of Airport Road to the south, cyclone fencing, and correctional buildings. Because of limited right-of-way along Airport Road, the presence of buildings that would remain onsite, and the need to provide adequate space for the lethal electrified fencing, the trees and landscaping along Airport Road would need to be removed from the site. In general, the proposed perimeter fencing would be denser than existing fencing and would be more prominent. The building density on-site would increase and nearly all interior trees, grassy areas, and shrubs would be removed from the site. A few, but not all, heritage oaks would remain (trees that would result in potential security issues would need to be removed). The character of the site would change to a more institutional and stark appearance. Middle-ground and distant views of the site would consist of the same changes, but would be somewhat less visible because of the visual prominence of the cyclone fencing. Overall, views of the CDCR property would be more institutional in appearance and the Master Reuse Plan would substantially change the development intensity of the site.

Implementation of the Master Reuse Plan would result in substantial changes of views of the site from Viewpoint 4, including changing views from a more school yard/facility appearance to a correctional institution. This impact would be ***significant*** *(Impact 4.13-2d).*

Viewpoint 5: Airport Road (Northeast of Athletic Field)

Foreground views from the existing Airport Road (Northeast of Athletic Field) viewpoint (Exhibit 4.13-6b) currently consist of Airport Road, cyclone fencing, and an open space–like setting with grass and trees. In the background, there are limited views of on-site buildings behind and between on-site trees. To the east of the CDCR property distant hillsides are visible. With implementation of the Master Reuse Plan, views of the CDCR property would consist of cyclone fencing along Airport Road and to the west of the Estrella Facility. This fencing primarily screens/mutes views of the open grassy area, causing views of the site to appear more institutional. All visible trees within the perimeter of the fence would be removed from this viewpoint. Although the site would have open space areas on-site, these areas would be devoid of other supportive vegetation (i.e., trees/shrubs) and would appear stark compared to existing views. Views of distant hillsides to the east of the CDCR property would not change with implementation of the Master Reuse Plan. Overall, views of the site from Viewpoint 5 would substantially change because of the removal of trees and other shrubbery and the densification of fencing and buildings.

Implementation of the Master Reuse Plan would result in substantial changes to views of the site from Viewpoint 5, including densification of fencing and on-site building and the removal of on-site trees. This impact would be ***significant*** *(Impact 4.13-2e).*

Viewpoint 6: Airport Road (East of Undeveloped Portion of Site)

This viewpoint is located slightly north of Viewpoint 5, but faces to the west to undeveloped areas of the CDCR property. Foreground views from the existing Airport Road (East of Undeveloped Portion of Site) Viewpoint (Exhibit 4.13-7b) consist of undeveloped, mowed grassland. In the middleground, cyclone fencing associated with the CAL FIRE facility is visible and the existing CAL FIRE facilities are visible to the north. In the distant

background, views of surrounding hillsides are available. Views of the former DJJ facility are limited to cyclone fencing and open space areas. With implementation of the Master Reuse Plan, the development intensity of the site would substantially increase through the development of new dormitory buildings and other support buildings at the CAL FIRE site. Foreground views would remain largely unchanged. The new dormitory buildings for the camp would become the dominant visual feature of the site. Limited views of the rooftops and some reentry building are available in the background; however, these buildings would not dominate the visual landscape. Although the proposed buildings and interior landscaping for the Master Reuse Plan facilities would be consistent with the design of correctional facilities proposed for other areas of the site, these buildings would change the character of the site from a more rural appearance to a more developed institutional appearance. Views of the distant hillside areas would be blocked in lower areas of the hillsides, but views of the ridgelines would remain. Overall, implementation of the Master Reuse Plan would substantially alter the visual setting by introducing a higher density and larger development footprint from CAL FIRE facilities, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance.

Implementation of the Master Reuse Plan would substantially alter the visual setting from Viewpoint 6 by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. This impact would be ***significant*** *(Impact 4.13-2f).*

Viewpoint 7: Airport Road (Southeast of existing CAL FIRE operations)

Existing views of the CDCR property from Viewpoint 7 (Exhibit 4.13-8a) are substantially similar to existing views from Viewpoint 6. Foreground views from the existing Airport Road (Southeast of Existing CAL FIRE Operations) viewpoint consist of undeveloped grassland. In the middleground, cyclone fencing associated with the CAL FIRE facility is visible, and the existing CAL FIRE facility is visible to the north. Several trees surround the existing CAL FIRE facility and screen views of those buildings. In the distant background, views of surrounding hillsides are available and are prominent from this viewpoint. No views of the former DJJ facility are available because of the angle of this viewpoint. With implementation of the Master Reuse Plan, the development intensity of the site would substantially increase through the development of new dormitory buildings and other support buildings at the CAL FIRE site (Exhibit 4.13-8b). Foreground views would remain largely unchanged. The new dormitory buildings for the camp would become the dominant visual feature of the site from this viewpoint and would substantially increase the developed footprint and the development intensity of the site. Although the proposed buildings and interior landscaping would be consistent with the design of correctional facilities proposed for other areas of the site, these buildings would change the character of the site from a more rural appearance to a more developed institutional appearance. In the background, additional CAL FIRE buildings are visible. Limited views of one rooftop for a reentry building are available in the background between CAL FIRE buildings. Views of the distant hillsides and ridgelines would be almost completely blocked from this viewpoint. Overall, implementation of the Master Reuse Plan would substantially alter the visual setting by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance.

Implementation of the Master Reuse Plan would substantially alter the visual setting from Viewpoint 7 by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. Further views of distant hillside and ridgeline areas would be almost completely blocked from this viewpoint. This impact would be ***significant*** *(Impact 4.13-1g).*

Overall Visual Change: Master Reuse Plan

The discussion above examines the visual change of the site from several viewpoints and concludes that most views are substantially similar to the existing views of the site, but that the views from Airport Road approaching the site from the north (to south) views would be substantially different. When assessed as a whole, however, the visual character of the site would change from a site where buildings generally dominate the viewshed to one where dense security fencing generally dominates the viewshed. The reentry facility would only be visible from Airport Road when approaching the site traveling from north to south. The overall appearance of the site would change from a somewhat generic institutional setting that appears to possibly be correctional from some

viewsheds, to a site that is unquestionably a correctional facility. The reentry facility would reinforce the change for viewers traveling from north of the facility to south. The site is along Airport Road, a road designated in the City's general plan as a visual gateway to the city. The combination of denser development, including more dense development with the reentry facility when viewed by travelers driving south on Airport Road, and the visual reinforcement indicating that the site is dedicated to correctional uses, would constitute a substantial change in the visual setting, and the change would be a significant impact.

Overall, the CDCR property would take on the appearance of a more densely developed facility. It would more obviously be a correctional facility, with security fencing dominating much of the viewshed. Given the site's location within a visual gateway to the city of Paso Robles, this impact would be ***significant*** *(Impact 4.13-1h).*

Impact 4.13-3: New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

At night, lighting would be primarily associated with the Estrella Facility because it would contain building-mounted lighting and pole-mounted lighting (Exhibits 4.13-9a and 4.13-9b). Some security lighting would also be provided at the CAL FIRE facilities, but this lighting would only consist of building-mounted, low-cast perimeter lighting and would not be substantially different from other nighttime lighting sources in the area (i.e., industrial buildings north of the site, lighting at the Paso Robles Municipal Airport). Lighting sources from reentry buildings (i.e., perimeter wall-mounted lights, no pole-mounted lights) would not be visible from any of the viewpoints on Airport Road because of the intervening buildings. Rather, lighting would contribute to the overall glow that would emanate from the site. Therefore, the nighttime lighting conditions associated with views of the Master Reuse Plan facilities were simulated for the Estrella Facility from Viewpoint 2, the viewpoint that would provide the greatest perspective on the magnitude of change that would occur with nighttime lighting. The nighttime lighting simulation was prepared based on the best, but limited, information available about existing and proposed lighting for the Estrella Facility. New lighting would be located primarily along the perimeter, while existing lighting sources supplemented with some new building lighting would be used for interior areas of the site. Areas all along Airport Road would have views of the existing and proposed lighting sources. Existing nighttime views of the former DJJ facility (Exhibit 4.13-9a) include the shadows of existing on-site buildings and intermittent perimeter building-mounted lighting sources. Some of these sources do not have directional shielding and result in glare to off-site areas. With implementation of the Master Reuse Plan, the perimeter nighttime lighting sources for the Estrella Facility would moderately increase nighttime lighting sources in the area and would be more uniform, and the buildings and cyclone fencing would be clearly visible. Although not modeled in the simulation because the specific location of new pole-mounted lighting is not known, approximately five new 35-foot-tall pole-mounted perimeter lights would be located inside the eastern secured perimeter of the proposed Estrella Facility. No high-mast lighting at the site is proposed. The pole-mounted lighting sources would serve to increase the glow of lighting from the site compared to that shown in the simulated exhibit. Although all lighting sources would be shielded and cast downward consistent with CDCR design standards, when viewed from more distant areas, the lighting associated with the Master Reuse Plan could appear to increase skyglow in the area because the existing site is currently relatively dark.

Implementation of the Master Reuse Plan would substantially alter the areas lit and intensity of lighting on-site. This impact would be ***significant*** *(Impact 4.13-3).*

4.13.4 PROPOSED MITIGATION MEASURES

LESS-THAN-SIGNIFICANT IMPACTS

The following impacts were identified as less than significant, and therefore no mitigation is required:

Impact 4.13-1: Potential for Damage to Scenic Resources

Impacts 4.13-2a, 4.13-2b, and 4.13-2c: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings (Viewpoints 1–3)

Simulated View (4.13-9a)

Simulated View (4.13-9b)

Representative Design Elements **Exhibit 4.13-9**

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following visual impacts were identified as significant. Mitigation identified below would substantially reduce the visual effects for all significant impacts listed below, but not to a less-than-significant level.

Impacts 4.13-2d through 4.13-2h: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings (Viewpoints 4–7 and overall visual change)

The following mitigation measures will be implemented by CDCR:

- Use paint and design elements on the new entrance sign that generally reflect the character of the Paso Robles Inn or the City of El Paso De Robles city limits sign to better reflect the visual character of the city.
- Landscape in and around the entrance sign, enlarged parking lots, planted beds, and in front of the existing administration building.

Some of these design elements have been simulated or are shown for illustrative purposes through representative photographs to determine their relative effect on views of the CDCR property from off-site locations. Exhibit 4.13-10 presents an entrance sign and landscaping mitigation concept for the Master Reuse Plan from the Airport Road (South of Dry Creek Road) viewpoint. This viewpoint was selected because it shows the area of the site that has the fewest security-related restrictions related to mitigated design concepts. As can be seen from the visual simulation, the entrance sign and landscaping add some character that is representative of the city of Paso Robles. CDCR will also consider other representative building design façades representative of Paso Robles (Exhibit 4.13-11) in the design of entrance facilities.

Source: Photograph by Ascent Environmental, Inc. in 2010.

Proposed Mitigation Concept **Exhibit 4.13-10**

Source: Photograph by Ascent Environmental, Inc. in 2010.

Source: Photograph by Ascent Environmental, Inc. in 2010.

Representative Design Elements **Exhibit 4.13-11**

Although CDCR will make its best effort to design facilities to reduce visual impacts, the Master Reuse Plan would nevertheless result in a substantial change in the local viewshed. Impacts would be substantially reduced through implementation of the above measures. However, because of the physical limitations of the site (e.g., existing buildings, limited on-site space, lack of right-of-way) and required security protocols, other design treatments (e.g., facades, landscaping, architectural additions) are not feasible. Therefore, significant and unavoidable impacts would still result for the following viewpoints:

- Viewpoint 4,
- Viewpoint 5,
- Viewpoint 6,
- Viewpoint 7, and
- overall visual change.

Mitigation Measure 4.13-3: New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

CDCR considered several design options to reduce potential significant visual impacts. Regarding lighting, CDCR already uses state-of-the-art lighting in all its new facilities. This lighting is designed to cast light only where needed, and to cut off glare to off-site areas. There are no other known measures that CDCR can implement that would provide sufficient lighting to maintain security needs without some of this light being visible off the CDCR property. Therefore, nighttime lighting impacts would remain significant and unavoidable.

5 CUMULATIVE IMPACTS

5.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

Section 15130 of the State CEQA Guidelines requires that an EIR discuss cumulative impacts of a project and determine whether the project's incremental effect is "cumulatively considerable." The definition of cumulatively considerable is provided in Section 15065(a)(3):

> "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

According to Section 15130(b) of the State CEQA Guidelines,

> [t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

For purposes of this EIR, the project would have a significant cumulative effect if:

- the cumulative effects of related projects (past, current, and probable future projects) without the project are not significant and the project's incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- the cumulative effects of related projects (past, current, and probable future projects) without the project are already significant and the project contributes measurably to the effect. The standards used herein to determine measurability are that either the impact must be noticeable or must exceed an established threshold of significance.

Mitigation measures are to be developed, where feasible, that reduce the project's contribution to cumulative effects to a less-than-significant level.

This DEIR identified potentially significant environmental impacts associated with implementation of the proposed project; those impacts are addressed in Chapter 4, "Environmental Setting, Thresholds of Significance, Environmental Impacts of the Project, and Proposed Mitigation Measures."

These issues, and others that could contribute considerably to cumulatively significant effects, are discussed below in the context of cumulative development.

5.2 RELATED PROJECTS

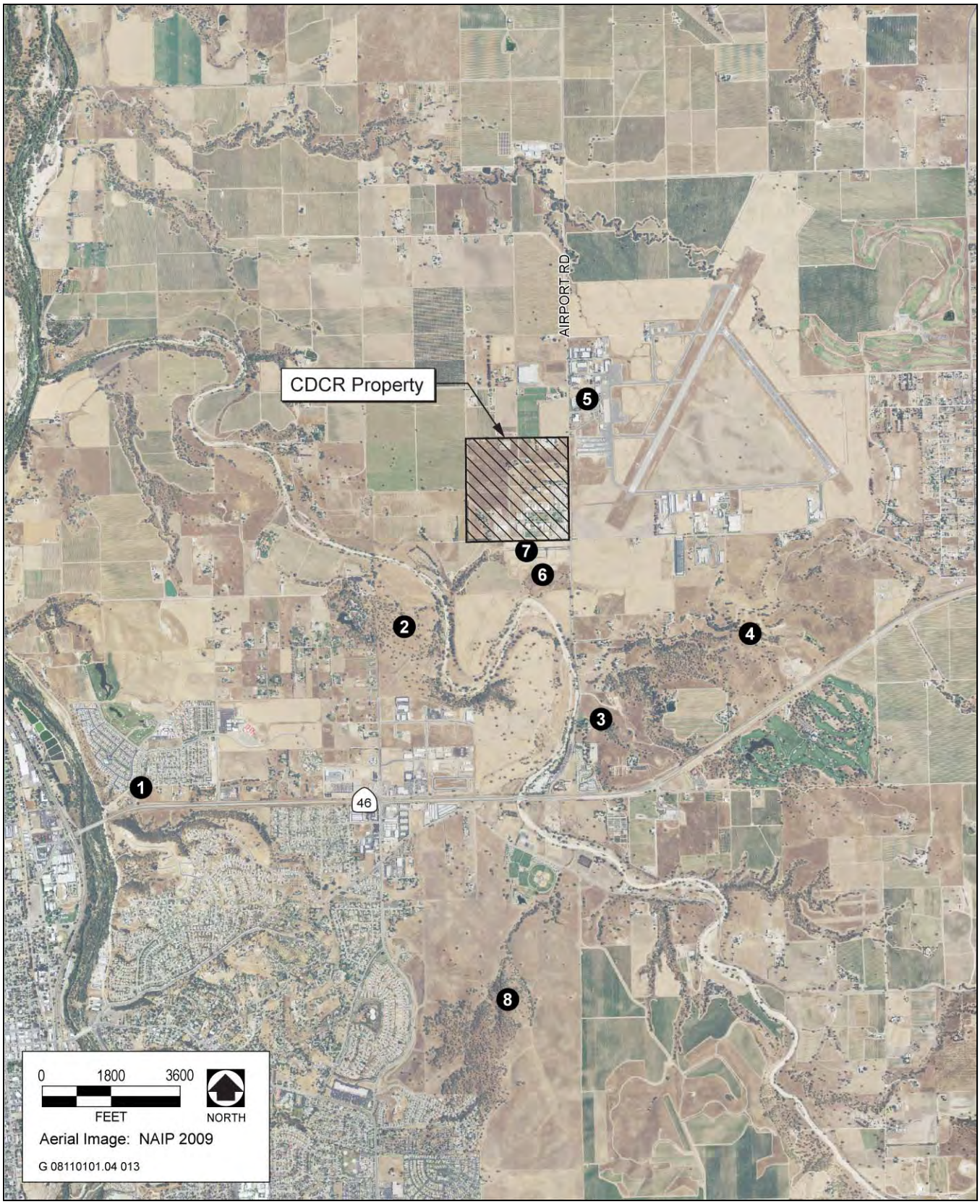
The analysis of cumulative environmental impacts associated with the project addresses the potential incremental impacts of the project in combination with those of other past, present, and probable future projects and land use changes. The projects listed in Table 5-1 and shown in Exhibit 5-1 are not intended to be an all-inclusive list of projects in the region, but rather an identification of projects constructed, approved, or under review in the vicinity of the Master Reuse Plan facilities and the city of Paso Robles that have some relation to the environmental impacts of the project. The analysis is based on information obtained from the City of Paso Robles (City) Community Development Department (City of Paso Robles 2010) and CDCR.

Table 5-1 List of Projects in the Vicinity of the Paso Robles Property Master Reuse Plan Site						
Exhibit 5-1 Map Key	Project Name	Total Acreage	Developed or Proposed Land Use	Total Number of Dwelling Units	Total Commercial Square Footage	Status
1	Willhoit the "Cove"	4.28	Single-family residential	51	NA	Working on map recordation.
2	PR Motorcoach RV Park	160	332-space recreational vehicle park	NA	NA	Preparing submittal for building permits.
3	Handley	40	Resort hotel, restaurant, conference center	291 hotel units	40,000 sq. ft.	Received development entitlements. Not currently under construction.
4	Vaquero	386	Resort hotel, golf course	280 hotel units	50,000 sq. ft.	Received development entitlements. Not currently under construction.
5	Specialty Silicone	4.2	Medical products manufacturing	NA	100,000 sq. ft.	Under construction.
6	Airport Business Park, Tract 2772	30	Total of 13 1-acre lots for business park development	NA	130,000 sq. ft.	Tentative map has been approved.
7	Winery Row Tract 2772	10	Total of 14 1-acre lots for winery related uses	NA	140,000 sq. ft.	Lots improved. No construction activity currently ongoing.
8	Chandler Ranch	827	Residential specific plan	1,439 units	NA	Revised specific plan in process.

Notes: NA = not applicable; sq. ft. = square feet.
Source: City of Paso Robles 2010

5.3 GEOGRAPHIC SCOPE

The geographic area that could be affected by the project varies depending on the type of environmental resource being considered. When the effects of the Master Reuse Plan are considered in combination with those of other past, present, and future projects to identify cumulative impacts, the other projects that are considered may also vary depending on the type of environmental effects being assessed. The general geographic area associated with different environmental effects of the project defines the boundaries of the area used for compiling the list of projects considered in the cumulative impact analysis. Table 5-2 presents the general geographic areas associated with the different resources addressed in this DEIR analysis.



Source: City of Paso Robles 2010, compiled by AECOM in 2010

Projects in the Vicinity **Exhibit 5-1**

Table 5-2 Geographic Scope of Cumulative Impacts	
Resource Issue	Geographic Area
Air Quality and Climate Change	Regional (pollutant emissions that have regional effects) Local (immediate project vicinity—pollutant emissions that are highly localized) Global (greenhouse gas emissions)
Biological Resources	Local (project vicinity)
Cultural Resources	Local (limited to CDCR property)
Employment, Population, and Housing	Regional and local
Geology and Paleontology	Local (limited to CDCR property)
Hazards and Hazardous Materials	Local (immediate project vicinity)
Hydrology and Water Quality	Local (immediate project vicinity—local watershed)
Land Use and Planning	Regional and local
Noise	Local (immediate project vicinity—effects are highly localized)
Public Services	Local
Transportation	Regional and local
Utilities and Service Systems	Regional
Visual Resources (light and glare; aesthetics)	Local (immediate project vicinity)
Note: CDCR = California Department of Corrections and Rehabilitation Source: Data compiled by AECOM in 2010	

5.4 ANALYSIS OF CUMULATIVE IMPACTS

5.4.1 AIR QUALITY AND CLIMATE CHANGE

AIR QUALITY

The construction and operation of cumulative projects, as listed in Table 5-1, would generate air pollutant emissions in San Luis Obispo County, and thus would contribute to the existing nonattainment conditions specifically in regard to ozone and respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}). As discussed in Section 4.1, "Air Quality," the Master Reuse Plan would generate construction-related and operational emissions that exceed San Luis Obispo Air Pollution Control District (SLOAPCD) significance thresholds. Although these impacts would be mitigated to a less-than-significant level with implementation of SLOAPCD-recommended mitigation measures, when taken in total with other related emissions and the nonattainment conditions in the basin, these emissions would have a considerable contribution to a cumulatively significant impact.

The Master Reuse Plan's incremental effect with respect to short-term construction-related and long-term operational emissions would be cumulatively considerable when added to an existing and potential future nonattainment status of the air basin, which is a significant cumulative impact on air quality. This cumulative impact would be ***significant and unavoidable.***

CLIMATE CHANGE

An individual project cannot generate enough greenhouse gas (GHG) emissions to significantly influence global climate change. A project participates in this potential impact to the extent its incremental contribution, combined with the cumulative contributions of all other sources of GHGs, when taken together, cause global climate change impacts. Refer to Section 4.1, "Air Quality," for a discussion of the existing physical and regulatory setting related to climate change and GHG emissions.

Construction and long-term operation of the Master Reuse Plan would generate associated GHG emissions from area and mobile sources, and indirectly from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with visitors, employees, and deliveries to the CDCR property. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas consumption for space and water heating, and other sources. Increases in stationary-source emissions could occur at offsite utility providers associated with electricity consumption.

GHG emissions generated by the Master Reuse Plan would predominantly consist of carbon dioxide (CO_2). CO_2 emissions persist in the atmosphere for a substantially longer period of time than criteria air pollutants, such as ozone and PM_{10}. Although emissions of other GHGs, such as methane, are important with respect to global climate change, emissions levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO_2.

Electricity consumption at offsite electricity generation facilities (i.e., power plants) would result in the primary GHG emissions associated with the Master Reuse Plan (e.g., approximately 25% of total emissions). Mobile-source emissions from project-related vehicle trips and vehicle miles traveled (VMT) would be the second largest source of GHG emissions. Using standard traffic engineering methodologies that treat all trips to and from a project site as a "net increase" or "new" trips, and all project-related VMT as "new" VMT, is appropriate for localized and regional air quality or traffic analyses, where the location of emissions within a distinct air basin or impacts on the local roadway network, respectively, are important. However, given the global nature of the global warming phenomenon and the state legislation for regulating California's contribution to this global impact, it may be inappropriate to assess GHG emissions in the same manner as for air quality or traffic.

For instance, a person working at the project may have previously driven to another facility or job, producing GHGs along the way, and rather than being a net new trip contributing GHG emissions, this in reality is a tripalready occurring, but at a different location. Further, as discussed in Chapter 3, "Project Description," the Paso Robles Property Master Reuse Plan (Estrella Facility) is proposed in response to a bed shortage for current and projected male inmate population. The existing inmate population would likely be moved from "nontraditional" temporary housing at other prisons to these new beds, and these inmates would have been placed in a comparable institution somewhere else in California, with or without the proposed project. In addition, when a person is placed in a state prison, that person no longer drives and the mobile-source emissions associated with the person's daily VMT would no longer occur. Further, the GHGs associated with their nonprison daily lives (before incarceration) would still occur, but at a different location. However, new mobile-source emissions would be generated from visitor, employee, and delivery trips to and from the facility. Thus, the Master Reuse Plan could be viewed as "accommodating" GHG emitters, and may not itself "create" GHG emissions. Nonetheless, this EIR assumes that all GHG emissions attributable to the Master Reuse Plan are "new." This is the most conservative approach to GHG analysis in the context of CEQA.

The following discussion reviews the Master Reuse Plan's potential generation of GHGs and its incremental contribution to the cumulative effect resulting from emissions of GHGs. A two-tiered approach is used, as follows: (1) the potential for project-generated GHG emissions to have a significant impact on the environment and (2) the potential for the project to conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

Project-Generated Greenhouse Gas Emissions and Cumulative Contribution to Climate Change Impacts

Short-term construction and long-term operation of the Master Reuse Plan would generate emissions of GHGs. Construction emissions would be associated with vehicle engine exhaust from construction equipment, vendor trips, and employee commute trips. Operational emissions would be associated with area, mobile, and stationary sources. Increases in stationary-source emissions would occur at offsite utility providers associated with electricity generation and water distribution that would supply the proposed project. Implementation of the Master Reuse Plan would result in the addition of approximately 1,472 vehicle trips per day to the project area (Fehr & Peers 2010).

Considerations in Determining Impact Significance

The project-generated GHG emissions from this project, calculated below, or for any single project for that matter, would appear miniscule in comparison to the state or global inventory; however, this type of comparison only serves to minimize the cumulative nature of this impact. For this reason, it is important to consider an appropriate context for GHG emissions. GHG emissions are dispersed throughout the atmosphere worldwide, and the effects of climate change are borne globally, unlike criteria air pollutant and precursor emissions, which have regional and/or local impacts on air quality. As noted earlier, not all GHG emissions attributable to the Master Reuse Plan can be treated as "new".

Assembly Bill (AB) 32 required that the California Air Resources Board (ARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. This emissions level would have to be accomplished with 30 years (1990–2020) of population and economic growth in place. Effectively, California will need to be more GHG-efficient in all areas of energy consumption to achieve this mandate, which is equivalent to a total GHG emissions reduction of approximately 25% to 30% from a "business-as-usual" scenario in California, across all emissions sectors. Development of a prison is not its own "sector," but draws on emissions from the energy and transportation sectors. All sectors will be required, under regulations already adopted or to be adopted in compliance with AB 32, to implement measures and programs so they are more GHG-efficient. The best metric for determining whether the Master Reuse Plan would contribute substantially to the cumulative impact of climate change is whether or not the project could reduce GHG emissions to become compliant with AB 32 requirements, or at least produce GHG emissions in an energy efficient manner that reflects the efficiency needed for the state to achieve AB 32 goals while still supporting population and job growth.

A numeric threshold is the best measure for determining significance; unfortunately, no agency with jurisdiction over the project or the area in which the project is located has adopted a threshold. SLOAPCD, like nearly every other air district in California, and ARB have not adopted GHG thresholds of significance for CEQA. Two air districts, the Bay Area Air Quality Management District (BAAQMD) and the South Coast Air Quality Management District (SCAQMD), have established GHG thresholds; they provide context for consideration of the project and are discussed further below.

To establish context in which to consider the order of magnitude of project-generated GHG emissions, it should be noted that facilities (i.e., stationary, continuous sources of GHG emissions) that generate greater than 25,000 metric tons (MT) carbon dioxide equivalent per year (CO_2e/yr) are mandated to report their GHG emissions to ARB pursuant to AB 32. On a national (federal) level, the Council on Environmental Quality recommends 25,000 MT CO_2e/yr as the level below which full analysis of GHG emissions is not required for projects subject to the National Environmental Policy Act (NEPA). (The Council on Environmental Quality coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.) In addition, BAAQMD and SCAQMD have both adopted 10,000 MT CO_2e/yr as the CEQA significance threshold for industrial projects where the air district is the lead agency. This emissions level also corresponds to the limit used by ARB for facilities to report their GHG emissions and participate in cap-and-trade. In addition, on June 2, 2010, BAAQMD adopted 1,100 MT CO_2e/yr as its CEQA

significance threshold for GHG emissions from land use development projects in its jurisdiction. SCAQMD is currently considering a 3,000 MT CO_2e/yr threshold.

The BAAQMD and SCAQMD project-level thresholds are associated with project types for which transportation emissions are typically dominant, specifically those land use types contained within the URBEMIS model. However, the above information is presented for informational purposes only, and it is not the intention of CDCR to adopt 25,000, 10,000, 3,000, or 1,100 MT CO_2e/yr as a numeric threshold. CDCR typically would use thresholds adopted by the agency with jurisdiction over the project or its geographic area, but given there are none in this instance (see prior discussion), CDCR's intention is to put project-generated GHG emissions in the appropriate statewide context in order to evaluate whether the Master Reuse Plan's contribution to the global impact of climate change is considered substantial. Further, as already explained, the GHG emissions associated with the project are likely substantially overstated, given the considerations surrounding inmates and employees. The following impact discussion will rely on a qualitative analysis considering the extent to which the project may increase or reduce GHGs as compared to the existing environment per Section 15064.4 of the State CEQA Guidelines, "Determining the Significance of Impacts from Greenhouse Gas Emissions."

Construction under the Master Reuse Plan would generate a finite quantity of approximately 733 MT CO_2 over the duration of construction activities (Table 5-3). Construction would contribute GHG emissions to a much lesser extent than operation of the Master Reuse Plan, but emissions are amortized over the lifetime of the project per SLOAPCD recommendations. As shown in Table 5-3, operation of the Master Reuse Plan would result in a total net increase in GHG emissions of approximately 9,835 MT CO_2e annually during the lifetime of the project. Project-generated GHG emissions would be below the 25,000 and 10,000 MT CO_2e/yr levels and above the proposed 3,000 and adopted 1,100 MT CO_2e/yr thresholds discussed above. The project would utilize an existing facility and implement energy-efficient LEED design standards, thus meeting the state's need to address prison overcrowding while also meeting the goals of AB32. Although this is contextual, a conservative interpretation would suggest that the project's impacts associated with GHG are considerable.

The Master Reuse Plan would be anticipated to generate GHG emissions, directly or indirectly, that may have a significant impact on the environment. As a result, this incremental increase in GHGs would be cumulatively considerable and significant.

Mitigation to reduce this impact is recommended below.

Implement Mitigation Measure 4.1-2: Generation of Long-Term Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursors

Implementation of this mitigation measure is intended to reduce emissions of criteria air pollutants and precursors and would also result in some amount of emissions reduction in GHGs from area and mobile sources. Because of the close correlation between ozone precursor and GHG emissions from mobile sources, it is reasonable to expect that the manner in which ozone precursor emissions would be reduced would also be effective in reducing GHG emissions to a similar extent for applicable sectors. Implementation of the above mitigation measure would reduce GHG emissions, but not to a level that would not be cumulatively considerable. Therefore, this impact would remain cumulatively significant and unavoidable and the project's contribution would be considerable**.**

5.4.2 BIOLOGICAL RESOURCES

Habitat for biological resources has been substantially reduced in the local area over time, as land has been converted to agricultural land and or urban development. It is expected that habitat value would continue to decrease as residential and urban development progresses in the region, especially in Paso Robles. This is a potentially significant cumulative impact on regional biological diversity. As described in Section 4.2, "Biological Resources," the CDCR property is already developed, and implementing the Master Reuse Plan would result in the fill of an ephemeral drainage that provides low-quality habitat, as well as the removal of several mature oak trees, which provide suitable nesting habitat for common and special-status raptors. Although habitat is only

Table 5-3 Summary of Modeled Greenhouse Gas (CO_2e) Emissions for the Master Reuse Plan	
Source	CO_2e Emissions
Construction Emissions (to occur over 1-year buildout period)	**Metric tons[1]**
Total Construction GHG Emissions	**733**
Operational Emissions (to occur over the lifetime of the project)	**Metric tons/year[1]**
Amortized Construction Emissions[2]	29
Area Sources	820
Mobile Sources	1,597
Electricity Consumption	7,229
Water Consumption	160
Total Operational GHG Emissions	**9,835**

Notes: CO_2e = carbon dioxide equivalent; GHG = greenhouse gas.

The values presented in Table 5-3 do not include the full life-cycle of GHG emissions that may occur over the production/transport of materials used during construction of the project, solid waste or waste water disposal over the life of the project, end-of-life of the materials and processes that would contribute to GHG emissions that occur as an indirect result of the project, etc. Doing so would be speculative and would require analysis beyond the current state of the art in impact assessment, and would lead to a false and misleading level of precision in reporting of project-related GHG emissions.

1 Emissions were modeled using the URBEMIS 2007 (v9.2.4) computer model, based on trip generation rates contained in the traffic analysis prepared for the project (Fehr & Peers 2010), proposed land uses identified in the project description, and default model assumptions where detailed information was not available. URBEMIS accounts for emissions from vehicles and natural gas use. URBEMIS output is in units of tons CO_2e/year, whereas a standard unit for reporting GHG emissions is in metric tons CO_2e/year. Conversions of URBEMIS output to metric units are contained in Appendix C.

2 The San Luis Obispo Air Pollution Control District recommends amortization of total construction-related emissions over the lifetime of the project (i.e., 25 years for commercial land uses) and addition of amortized construction emissions to operational emissions.

3 Indirect emissions associated with stationary sources (increased energy consumption and water consumption) were calculated using the data from the California Energy Commission and California Climate Action Registry General Reporting Protocol (v3.1). Detailed calculations and reference material are contained in Appendix C.

Refer to Appendix C for detailed assumptions and modeling output files.

Source: Data modeled by Ascent Environmental in 2010.

marginally suitable, burrowing owls could potentially occur on the CDCR property. The loss of mature oak trees, and the potential loss of burrowing owl and raptor nesting habitat would be a significant impact. Impacts on wetlands and waters of the United States and oak trees would be potentially significant. Thus, implementation of the Master Reuse Plan along with other planned, proposed, and approved projects in the region would contribute to cumulative habitat loss in the region.

Operation of a lethal electrified fence at the proposed Estrella Facility would result in the death (i.e., electrocution) of animals, a large majority being birds, some of which are protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Other planned, proposed, and approved projects in the region could also result in significant impacts to animal and bird species. As described in Section 4.2, “Biological Resources,” it is not expected that the Master Reuse Plan would eliminate any resident or migratory animal or bird species or reduce species diversity in the project vicinity; however, it is possible that the local population of one or more native birds, protected by the MBTA and the Fish and Game Code, could be substantially affected. Mitigation recommended for the Master Reuse Plan and committed to by CDCR as the project applicant and lead agency would result in CDCR’s coordination with the U.S. Fish and Wildlife Service and California Department of Fish and Game, and implementation of measures to minimize, deter, and

compensate for the project's impact on native wildlife populations. It is assumed that other cumulative developments would be required to implement similar measures.

The 160-acre property is currently surrounded by a 12-foot-tall cyclone perimeter fence that prevents the site from functioning as a substantial wildlife movement corridor and currently impedes wildlife movement. Within the existing perimeter cyclone fence, an existing cyclone fence surrounds the proposed Estrella Facility. Because of the presence of the existing perimeter cyclone fences on the CDCR property, implementation of the Master Reuse Plan, including the installation of new fencing surrounding the Estrella Facility, would not substantially interfere with wildlife movement or establishment of migratory corridors, or impede the use of important nursery sites because all new fences would be installed in the same location or within the existing perimeter fence that surrounds the CDCR property. Therefore, the Master Reuse Plan would not combine cumulatively with other developments in the city of Paso Robles or surrounding areas to result in any significant impacts on wildlife movement.

Cumulative developments could result in potentially significant impacts on resident or migratory bird species. However, with implementation of the mitigation measures proposed for the Master Reuse Plan, the Master Reuse Plan's contribution to these impacts would be reduced to a less-than-significant level. Therefore, the project's contribution to cumulative impacts on resident or migratory bird species would be ***less than significant****.*

5.4.3 CULTURAL RESOURCES

As described in Section 4.3, "Cultural Resources," the Master Reuse Plan would result in potentially significant impacts on undiscovered cultural resources; however, these impacts would be reduced to a less-than-significant level with implementation of recommended mitigation. Further, it is anticipated that other cumulative development would implement similar mitigation in the event of discovery of cultural resources. The Master Reuse Plan's impacts would be reduced to a less-than-significant level.

The Master Reuse Plan could result in the potential loss of undiscovered archaeological resources and human remains. Because the Master Reuse Plan includes mitigation to avoid the loss of previously undiscovered archaeological resources and human remains, the project's contribution to any impacts on undiscovered archaeological resources would not be cumulatively considerable. Further, other cumulative projects would be required to implement similar mitigation in the event of discovery of cultural resources. Therefore, cumulative cultural resources impacts would be ***less than significant*** *and the Master Reuse Plan's contribution would not be considerable.*

5.4.4 EMPLOYMENT, POPULATION, AND HOUSING

As described in Section 4.4, "Employment, Population, and Housing," because of the available labor pool in the project area (e.g., Paso Robles and San Luis Obispo County), most of the new job positions introduced by the Master Reuse Plan and cumulative development in the region could be filled by current residents in the project area and outlying communities without resulting in substantial in-migration of new residents. Further, it is anticipated that local land use jurisdictions would only approve growth and development (e.g., housing) that is consistent with and planned for in their growth projections and planning documents consistent with relevant planning and zoning laws. Some of the cumulative projects included in this analysis are proposals for new housing developments in the City (i.e., over 1,400 new units). Therefore, cumulative population and housing impacts would be less than significant and the Master Reuse Plan in combination with cumulative projects would not be anticipated to stimulate any new development that is not planned for by local land use agencies. The population growth and housing associated with the Master Plan would be absorbed in growth projections and available housing stock of regional and local communities.

Because the Master Reuse Plan would not cause substantial in-migration of workers or residents to the project area, cumulative population and housing impacts would be ***less than significant*** *and the Master Reuse Plan's contribution would not be considerable.*

5.4.5 GEOLOGY AND PALEONTOLOGY

GEOLOGY

Construction of the Master Reuse Plan would conform to the California Building Code standards, which contain specifications to reduce adverse effects on structures caused by earthquake-related ground shaking and to minimize secondary seismic hazards. By conforming to these building codes and implementing site-specific engineering measures developed in compliance with these codes, the Master Reuse Plan would not expose people or structures to substantial adverse effects related to seismic hazards. The soils on the CDCR property are described as dense and variably cemented and thus are not subject to high shrink-swell potential. As described in Section 4.5, "Geology and Paleontology," CDCR would complete soils studies and implement construction and design measures developed in response to the studies. Implementation of these mitigation measures would reduce the impacts related to earthquake-related ground shaking and secondary seismic hazards to a less-than-significant level.

Implementation of the various cumulative projects in the region could expose additional structures to seismic and soils hazards. The potential hazards could represent significant cumulative impacts if projects are not developed to the latest building standards and do not incorporate recommendations from site-specific geotechnical reports and grading/erosion plans. However, each project considered in this cumulative analysis must individually meet building code requirements, and no aggregate effect would result from combining the Master Reuse Plan and other cumulative development.

Renovation and reactivation of the Estrella Facility would not result in the disturbance of substantial areas of impervious surfaces. Most of this site where construction activities would occur would be paved or covered with buildings; therefore, potential soil erosion impacts are low. However, buildout of the CAL FIRE facility and construction of the reentry facility would involve ground disturbance for site preparation for new building foundations. This ground disturbance could cause potentially significant soil erosion impacts. Mitigation is recommended that would reduce this impact to a less-than-significant level. Other cumulative developments that would result in soil erosion impacts would be required to implement similar mitigation consistent with state and local policies and regulations. Therefore, this would be a less-than-significant cumulative impact.

The Master Reuse Plan would not result in significant cumulative impacts related to seismic or soils hazards because project design and construction would be required by law to conform to the California Building Code and other local planning regulations that contain specific design requirements to reduce damage from strong seismic ground shaking. Further, mitigation is included to reduce soil erosion impacts of the Master Reuse Plan. Other cumulative developments would be required to implement similar design standards and mitigation; therefore, this would be a ***less-than-significant*** *cumulative impact.*

PALEONTOLOGY

Paleontological resources could underlie the CDCR property and other cumulative project sites in the vicinity. Fossils are being discovered during development-related excavation and earthmoving activities with increasing frequency throughout the state. However, unique, scientifically important fossil discoveries are relatively rare and the likelihood of encountering them is based on the type of specific rock formations found underground. These rock formations vary from location to location. Furthermore, when unique, scientifically important fossils are encountered by construction activities, the subsequent opportunities for data collection and study generally provide a benefit to the scientific community.

Construction of the CAL FIRE and reentry facilities would result in ground-disturbing activities that could exceed 10 feet in depth. The fact that vertebrate fossils have been recovered in the project vicinity suggests that additional similar fossil remains could be uncovered during construction-related earthmoving activities at the CDCR property and other cumulative development sites. Mitigation (see Section 4.5, "Geology and Paleontology") has

been recommended to reduce the Master Reuse Plan's impacts on previously undiscovered paleontological resources to a less-than-significant level. It is assumed that other development-related projects in the region would be required to implement a similar mitigation to reduce impacts.

Because CDCR would implement mitigation to reduce the Master Reuse Plan's paleontological impacts and other cumulative development would be required to implement similar mitigation, this would be a ***less-than-significant*** *cumulative impact.*

5.4.6 HAZARDS AND HAZARDOUS MATERIALS

As described in Section 4.6, "Hazards and Hazardous Materials," the Master Reuse Plan would result in less-than-significant impacts related to the creation of hazards through the use, transport, or disposal of hazardous materials because use of hazardous materials at the site would be in compliance with federal, state, and local regulations. Regarding the exposure of construction workers to hazardous materials, implementation of the Master Reuse Plan could result in potentially significant construction worker hazard impacts because construction areas could contain petroleum hydrocarbons, fuel oxygenates, polychlorinated biphenyls (PCBs), and hazardous building materials such as lead-based paint and asbestos-containing material, as well as residual agricultural chemicals such as chlorinated pesticides. Implementation of recommended mitigation would ensure that property safety and clean up protocols are in place to avoid construction worker exposure to hazardous materials, which would reduce this impact to a less-than-significant level, and the project's contribution would not be considerable.

Regarding airport safety hazards, implementation of the Master Reuse Plan includes the construction of new buildings, two approximately 35-foot-tall observation towers, five 35-foot-tall pole-mounted lights, and a lethal electrified fence. Some of these structures may be incompatible with the *Paso Robles Municipal Airport Land Use Plan* and could expose CDCR property occupants and aircraft to airport-related safety hazards. Implementation of recommended mitigation would ensure that appropriate applications and forms are filed with the Federal Aviation Administration to confirm that none of the structures would result in a safety hazard. Therefore, the project would not contribute to cumulative safety hazard impacts.

The Master Reuse Plan would not result in significant cumulative hazards or hazardous materials impacts because CDCR would handle all materials in conformance with appropriate local, state, and federal regulations. Further mitigation is included to reduce potential safety hazards from the tower. This would be a ***less-than-significant*** *cumulative impact.*

5.4.7 HYDROLOGY AND WATER QUALITY

WATER QUALITY

Overall water quality in the region has degraded over time as natural habitat has been converted to farmland and urban uses, and these uses have resulted in runoff of various pollutants into local and regional waterways. A variety of programs have been implemented with the goal of halting degradation of water quality and reversing this trend. Several state and federal agencies are involved in these programs, many of which come from the federal Clean Water Act.

The Master Reuse Plan would result in surface disturbance through ground scraping, grading, trenching, and compaction associated with typical development activities. Existing vegetation would be removed, thereby increasing the potential for erosion. Construction activities and proposed land uses (e.g., roadways, parking areas) would generate atmospheric pollution, tire-wear residues, petroleum products, and oil and grease, which would be carried in stormwater runoff on the CDCR property. These constituents could enter the storm drainage system and adversely affect water quality. However, CDCR would comply with all relevant requirements of the Central Coast Regional Water Quality Control Board's storm water pollution prevention plan program, which would require the implementation of best management practices and other water quality protection measures to sufficiently reduce the project's potential surface water quality impacts during project construction. Further, the pollution prevention

plan, as well as mitigation requiring implementation of City of Paso Robles stormwater pollution prevention programs, would include measures to reduce runoff pollutants from operation of the project. It is assumed, given the presence of numerous regulatory programs, that other cumulative developments would be required to implement similar water quality protection measures. With implementation of these measures, cumulative water quality impacts would be less than significant and the project's contribution to these impacts would not be cumulatively considerable.

Because CDCR would implement best management practices and other water quality protection measures to reduce the Master Reuse Plan's stormwater quality impacts and other cumulative development would be required to implement similar measures to prevent water quality degradation, this would be a ***less-than-significant*** *cumulative impact, and the Master Reuse Plan's contribution to water quality impacts would not be cumulatively considerable.*

STORMWATER CAPACITY

Implementation of the Master Reuse Plan would result in the addition of impervious surfaces at the CDCR property associated with building, roadway, and fencing construction on land that is mostly developed. Although a formal hydrologic analysis of the site has not been performed, several preliminary drainage system design alternatives are being considered as part of the Master Reuse Plan, including onsite detention basins and low impact development techniques. Adequate drainage facilities would be provided for the Master Reuse Plan. It is anticipated that other cumulative development would be required to also provide adequate drainage facilities consistent with state and local policies and plans.

The Master Reuse Plan would provide adequate stormwater drainage facilities on the CDCR property to accommodate stormwater demands. Other cumulative developments would be required provide adequate stormwater facilities. This would be a ***less-than-significant*** *cumulative impact and the Master Reuse Plan's contribution to stormwater drainage impacts would not be cumulatively considerable.*

GROUNDWATER QUALITY

As described in Section 4.7, "Hydrology and Water Quality," abandoned agricultural or other types of wells may be located on the CDCR property in areas of proposed development. If present and not used or improperly decommissioned, contaminants could enter the groundwater aquifer. Mitigation was recommended to properly decommission any wells encountered; therefore, the Master Reuse Plan's impacts would be reduced to a less-than-significant level. It is anticipated that other cumulative projects would be required to implement similar mitigation in the event wells are located on their sites.

With implementation of the Master Reuse Plan, CDCR would properly decommission onsite wells that are encountered. Other cumulative developments would also be required to properly decommission wells. This would be a ***less-than-significant*** *cumulative impact and the Master Reuse Plan's contribution to groundwater quality impacts would not be cumulatively considerable.*

5.4.8 LAND USE

Land uses in the project area have been historically agricultural, with wine grapes as the primary agricultural product grown. Other agricultural uses—irrigated farmland and pastureland—are located nearby. The Paso Robles Municipal Airport and supporting land uses located directly east and northeast of the CDCR property and industrial buildings are located north on Airport Road. Within the broader project area, Paso Robles has generally transitioned from rural and agricultural land uses to a more urbanized land uses; however, agricultural lands uses are prevalent near the CDCR property.

The CDCR property is sufficiently distant from surrounding communities (i.e., the community of Templeton and city of Atascadero, and rural residences to the east) that the project would not result in impacts associated with the

division of an established community. Further, the project would not violate any policies intended to avoid significant environmental impacts. Two cumulative projects (Winery Row and Airport Business Park) are located in the nearby vicinity. As described in Section 4.8, "Land Use," the Master Reuse Plan was determined to be consistent with relevant policies of the City's general plan. Further, it is anticipated that other cumulative developments under review by local jurisdictions would comply with appropriate development policies. Projects that would not comply with local general plan could not be approved. None of the proposed projects would appear to divide a community or cause, in combination with the project, other land use impacts. Therefore, significant land use impacts would not occur and the Master Reuse Plan would not combine cumulatively with other developments in the area to result in any significant land use impacts.

The Master Reuse Plan would not result in any land use impacts (physically divide a community or violate a policy intended to avoid a significant environmental impact) and would be consistent with relevant policies of state and local jurisdictions. Cumulative projects would comply with local policies and plans for development. This would be a ***less-than-significant*** *cumulative impact.*

5.4.9 NOISE

CONSTRUCTION, TRAFFIC, AND OPERATIONAL NOISE IMPACTS

Construction work would result in site-specific noise impacts. One project (i.e., Winery Row) is located close enough (i.e., 1,000 feet) to the CDCR property that it would cumulatively combine with noise from the Master Reuse Plan; however, no construction activities are currently ongoing at Winery Row and there are no plans for development that the City is aware of at this time. Mitigation is recommended (see Section 4.9, "Noise") to reduce the Master Reuse Plan's impacts from construction activities to noise-sensitive off-site uses that would otherwise be exposed to significant construction noise. With implementation of recommended mitigation, the noise impacts of the Master Reuse Plan would be reduced a less-than-significant level.

To be considered significantly noticeable, project traffic would need to increase noise on project area roadways by approximately 3 A-weighted decibels (dBA). As described in Section 4.9, "Noise," cumulative development plus the project would result in barely perceptible noise increase on area roadways of 2.0 dBA or less under cumulative conditions. This noise increase would not result in a considerable contribution to traffic noise impacts.

As described in Section 4.9, "Noise," operational noise levels associated with the project would not result in noise levels that exceed state exterior or interior noise compatibility standards. Further, no cumulative projects are located close enough to the CDCR property that operational noise would cumulatively combine to result in noise levels that exceed state noise compatibility standards. Therefore, the project would not result in a considerable contribution to operational noise impacts.

The Master Reuse Plan plus cumulative development would not result in cumulatively considerable construction, traffic, or operational noise impacts. The Master Reuse Plan would not result in noise levels that would cumulatively combine with other cumulative projects such that they would exceed state construction or operational noise compatibility standards; nor would the plan, in combination with cumulative development, result in a substantial increase in traffic noise along area roadways. Therefore, cumulative noise impacts would be ***less than significant*** *and the Master Reuse Plan's contribution would not be considerable.*

LONG-TERM AMBIENT NOISE LEVELS

Cumulative noise levels could be affected by additional buildout of surrounding land uses, increases in vehicular traffic, and potential increases in air traffic at the Paso Robles Municipal Airport. As noted above, the only project that could combine cumulatively with the Master Reuse Plan is Winery Row because of its proximity to the southern perimeter of the plan area. However, development of this cumulative project is stalled and it is unknown when it would build out. The operation of Winery Row would involve wine tasting rooms, wine processing

facilities, and other commercial facilities associated with the wineries. The City's design guidelines and design review process for commercial and industrial development (Commercial and Industrial Design Guidelines and Development Design Guidelines for the Airport Business Park) address site and operational design of commercial and industrial development, including facilities generating external noise. Therefore, noise levels when combined with noise levels from the CDCR property would generally not be appreciably noticeable and would not result in ambient noise levels that exceed the City's applicable exterior noise levels. Therefore, stationary noise sources are not expected to result in noise in excess of applicable standards nor a substantial increase in ambient noise levels at the CDCR property as a result of surrounding land uses.

Future traffic noise levels were modeled using the Federal Highway Administration FHWA Traffic Noise Prediction Model and are presented below in Table 5-4. As shown, traffic noise levels would not exceed applicable exterior standards (65 decibels [dB] day-night noise level [L_{dn}]) or result in a substantial increase in ambient noise levels at the CDCR property, as shown in Table 5-4 below. Assuming a 25-dB reduction as a result of exterior-to-interior transmission loss from building façades, interior traffic noise levels would not exceed applicable interior standards (State of California Title 24 Noise Standards for Detention Facilities, 70 dB equivalent noise level [L_{eq}] daytime and 45 dB L_{eq} nighttime). Therefore, vehicular noise sources are not expected to result in noise in excess of applicable standards or in a substantial increase in ambient noise levels at the CDCR property.

5.4.10 PUBLIC SERVICES

POLICE AND FIRE PROTECTION SERVICES

Police and fire staff indicated that the implementation of the Master Reuse Plan would not substantially affect police and fire protection service. As the City builds out under its general plan, demand for police and fire protection service would increase, but the City would expand its police and fire protection service capacity commensurate with buildout. The general plan includes goals and policies to provide funding for these services and to maintain appropriate service levels, and the associated environmental impacts are addressed in the EIR prepared for the City's general plan. The Master Reuse Plan would not result in a population increase (and subsequent increases in police and fire protection service demand) beyond the population estimates in the general plan. Furthermore, as discussed in Section 4.10, "Public Services," the Master Reuse Plan would provide its own onsite security; therefore, increased demand for police protection services at the site would remain low under buildout conditions.

Because the Master Reuse Plan would not result in growth beyond general plan estimates and because the City's general plan would accommodate increases in demand for police and fire protection services associated with buildout, implementation of the Master Reuse Plan would not result in or contribute to a cumulative impact. Furthermore, the Master Reuse Plan would have its own onsite security, would enhance regional fire protection with CAL FIRE enhancements, and would not substantially increase long-term demand for police and fire protection services. Therefore, the cumulative police and fire impacts would be ***less than significant*** *and the project's contribution would not be considerable.*

SCHOOLS

All three school districts (Paso Robles Public Schools, Atascadero Unified, and Templeton Unified School District) have indicated declining enrollment in most grade levels. Implementation of the Master Reuse Plan would generate employment opportunities and could potentially result in indirect population growth. The indirect population growth would be accommodated by the existing, proposed, and planned housing stock in the region. The environmental impacts of this planned housing have or will be evaluated under the general plan EIR and other development EIRs. Because school impacts are generally associated with direct population increase (i.e., residential development), and because CDCR would pay school impact fees (see Section 4.10, "Public Services"), implementation of the Master Reuse Plan would not contribute to cumulative impacts associated with schools.

Table 5-4 Predicted Vehicular Traffic Noise Levels, Cumulative Conditions						
Roadway	From	To	L_{dn} (dBA) at 100 Feet from Roadway Centerline			Significant Impact?
			No Project	Plus Project (Inc. Estrella Facility + CAL FIRE)	Change	
SR 46	U.S. 101 southbound ramp	the West	68.0	68.2	0.2	No
SR 46	U.S. 101 northbound ramp	Buena Vista Drive	69.0	69.4	0.4	No
SR 46	Buena Vista Drive	Golden Hill Road	70.2	71.1	0.9	
SR 46	Golden Hill Road	Union Road	69.4	70.0	0.6	No
SR 46	Union Road	Airport Road	71.1	71.7	0.6	No
SR 46	Airport Road	Dry Creek Road	69.8	69.8	0.0	No
SR 46	Dry Creek Road	The East	69.3	69.3	0.0	No
Dry Creek Road	SR 46	Airport Road	54.3	54.3	0.0	No
Golden Hill Road	Union Road	the South	57.6	57.9	0.3	No
Buena Vista Drive	SR 46	the North	56.0	56.1	0.1	No
Golden Hill Road	SR 46	the North	55.0	55.0	0.1	No
Golden Hill Road	SR 46	Union Road	56.6	56.6	0.1	No
Union Road	SR 46	Golden Hill Road	55.7	56.3	0.6	No
Union Road	Golden Hill Road	the West	54.3	54.7	0.4	No
Airport Road	SR 46	Dry Creek Road	55.9	57.9	2.0	No
Airport Road	Dry Creek Road	The North	54.2	55.9	1.7	No

Notes: CAL FIRE = California Department of Forestry and Fire Protection; dBA = A-weighted decibels; L_{dn} = day-night noise level; SR = State Route; U.S. 101 = U.S. Highway 101. Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features; or noise contribution from other sources. See modeling results in Appendix D for further detail.
Source: Modeling performed by AECOM in 2010

Implementation of the Master Reuse Plan would not result in direct population growth, and any indirect population growth would be accommodated in existing and future housing. School impact fees would be paid by future housing. Furthermore, the proposed project would pay school impact fees. Therefore, implementation of the Master Reuse Plan would not result in or contribute to a significant cumulative impact. The cumulative impact would be ***less than significant****.*

5.4.11 TRANSPORTATION

Cumulative traffic impacts were evaluated and presented in Section 4.11, “Transportation.”

5.4.12 UTILITIES AND SERVICE SYSTEMS

SOLID WASTE

The 2006–2008 U.S. Census Bureau estimates the population of Paso Robles to be 28,953. The U.S. Environmental Protection Agency (EPA) estimates that 4.5 pounds of solid waste per capita are generated daily (EPA 2008). Therefore, the current population is assumed to be near 30,000 (using the general plan's population growth factor of 2.5%). It is estimated that Paso Robles currently generates approximately 49 million pounds per year of solid waste. The City's general plan anticipates a population of 44,000 residents in 2025. Therefore, in 2025 Paso Robles would be anticipated to generate just over 72 million pounds of solid waste per year (using the current rate of 4.5 pounds per day). Over the next 15 years the city would generate approximately 908 million pounds of solid waste. Add to this the project's estimated 76 million pounds of solid waste generated over the same time period, and the total solid waste generated by 2025 is 984 million pounds. This volume is well within the City's remaining landfill capacity of between 4 and 6.7 billion pounds.

Implementation of the Master Reuse Plan would not exceed capacity of the City's landfill under buildout conditions. This cumulative impact would be ***less than significant*** *and the project's contribution would not be considerable.*

ELECTRICITY AND NATURAL GAS

As described in Section 4.12, "Utilities and Service Systems," the Master Reuse Plan would not generate electricity demand that would exceed capacity of existing offsite Pacific Gas and Electric Company (PG&E) or Southern California Gas Company (SoCal Gas) facilities. Implementation of the Master Reuse Plan would not limit PG&E's or SoCal Gas's ability to serve future development.

Under cumulative conditions, implementation of the Master Reuse Plan would not limit the ability of energy and gas service providers to serve future development. This would be a ***less-than-significant*** *cumulative impact and the project's contribution would not be considerable.*

WASTEWATER TREATMENT AND CONVEYANCE FACILITIES

As discussed in Section 4.12, "Utilities and Service Systems," the Master Reuse Plan would increase flows to the City's wastewater treatment plant. Although sufficient capacity exists to treat flows from the project and cumulative development, the plant is not in compliance with waste discharge requirements administered by the Central Coast Regional Water Quality Control Board, particularly for slats and nitrogen. The project and other cumulative development would contribute additional flows to the plant, which would considerably exacerbate this significant water quality impact. This impact is addressed in Section 4.12 (see discussion in impact 4.12-1). The City is in the process of designing and upgrade to the treatment plant that would resolve this issue, and the upgrade would is expected to be completed in 2013, around the same time the project is planned to be completed. If the upgrade has not been completed, the project would contribute considerably to this cumulatively significant impact. This issue is fully addressed in Section 4.12, "Utilities."

The project would increase peak wastewater flows entering Lift Station 12 by 226 gallons per minute (gpm). According to the City's Sewer Collection System Master Plan (City of Paso Robles 2007) cumulative peak wastewater flows entering Lift Station 12 at buildout would be 2.1 million gallons per day (mgd) (1,458 gpm). The proposed project would contribute approximately 16% of the peak wastewater flows entering Lift Station 12 at buildout. Therefore, peak (mitigated) wastewater flows generated by the Master Reuse Plan, in combination with other cumulative development, would result in the exceedence of the capacity of Lift Station 12. It should be noted that the lift station capacity may be influenced by stormwater infiltration and inflow, and if so, this would suggest that the station has more capacity than currently considered, but this would require that leaks to the system are repaired. However, if capacity is exceeded, as it appears it would be, the project's contribution to this cumulative impact would be considerable.

*Peak (mitigated) wastewater flows generated by the Master Reuse Plan could contribute to a potential exceedance of the capacity of Lift Station 12. This would be a **significant** impact and the Master Reuse Plan contribution would be cumulatively considerable.*

Mitigation to reduce this impact to a less-than-significant level is recommended below.

Cumulative Wastewater

As described in Section 4.12 (see mitigation for impact 4.12-2), CDCR will pay appropriate fees based on the project's flow contribution (currently estimated to be approximately 16%) to the City toward the upgrade of Lift Station 12.

WATER SUPPLY

As described in Section 4.12, the City of Paso Robles is in the process of completing its infrastructure to allow conveyance and use of water from Lake Nacimiento. This will allow the City of accommodate both existing uses and planned growth (including the cumulative development discussed herein), while generally addressing a decline in the groundwater table. Additional entitlement to Nacimiento water is also available to the City; see Section 4.12.

Water Supply Option 1. CDCR Purchases Lake Nacimiento Surface Water Rights. Implementation of the Master Reuse Plan would increase total water demands by 219 acre-feet per year (afy). San Luis Obispo County has sufficient rights to Lake Nacimiento water supply to serve the project while still accommodating all other claimed water rights in the County. The Master Reuse Plan facilities would utilize this separate and reliable surface water supply source, and consequently would affect neither City/County water supply nor local groundwater levels.

*Implementation of Water Supply Option 1 would not adversely affect City water supply or groundwater levels. This would be a **less-than-significant** cumulative impact and the Master Reuse Plan's contribution would not be considerable.*

Water Supply Option 2. CDCR Utilizes City of Paso Robles Municipal Water (Including Groundwater). This option considers the potential that CDCR is unable to procure an entitlement to the 219 afy of water estimated to be used by the project. Although the City may be able to halt its contribution to the chronic decline of local groundwater levels by acquiring an additional 1,400 afy of Lake Nacimiento water, the additional water rights are not guaranteed. Further, it is uncertain whether the additional 1,400 afy of Lake Nacimiento water would be enough to halt the City's contribution to declining groundwater levels with the addition of the 219 afy demand generated by the Master Reuse Plan.

*Implementation of Water Supply Option 2 under the Master Reuse Plan could contribute to potential future overdraft conditions of the local groundwater basin. This would be a **significant and unavoidable** cumulative impact and the Master Reuse Plan's contribution would be considerable.*

CDCR will implement the following mitigation:

Implement Mitigation Measure 4.12-3b: Impacts on Water Supplies and Facilities. Option 2

Implementation of Mitigation Measure 4.12-3b would reduce water demand associated with landscaping. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because of local declines in groundwater levels, any contribution to this potential cumulative impact would be considerable. This impact would remain **significant and unavoidable**.

Water Supply Option 3. CDCR Continues Use of On-Site Wells. Implementation of the Master Reuse Plan would increase water demand by 219 afy. The proposed facilities are not included in the *City of Paso Robles 2005 Urban Water Management Plan* and the direct pumping of an additional 219 afy of groundwater would increase the rate of groundwater decline. Therefore, the Master Reuse Plan would contribute to long-term groundwater declines, which could result in eventual overdraft conditions.

Implementation of Water Supply Option 3 under the Master Reuse Plan could contribute to eventual overdraft conditions of the local groundwater basin. This is a ***significant*** *cumulative impact and the project's contribution would be considerable.*

CDCR will implement the following mitigation:

Implement Mitigation Measure 4.12-3c: Impacts on Water Supplies and Facilities. Option 3

Implementation of Mitigation Measure 4.12-3c would reduce water demand associated with landscaping. Implementation of Mitigation Measure 4.12-2, which requires installation of flush control and low-flow devices, would further reduce project water demand. However, because it is uncertain whether the City would be able to halt its current contribution to local declines in groundwater levels, any contribution to this potential cumulative impact would be considerable. This impact would remain **significant and unavoidable**.

5.4.13 VISUAL RESOURCES (LIGHT AND GLARE; AESTHETICS)

In general, the visual resources impacts of the cumulative projects are site specific in that they would not result in changes to other project areas within the local viewshed. With the exception of the Airport Business Park and Winery Row developments, projects in the vicinity are either sufficiently distant from the CDCR property or of small enough scale that they would not combine visually with the project's visual impacts. Past development of the project area has transformed the viewshed from agricultural and open space to a somewhat developed and industrial viewshed. Although many views in the project vicinity are attractive, consisting of a pastoral, agricultural viewshed, other viewpoints have been obstructed by industrial development, correctional institutions, or the airport. As described in Section 4.13, "Visual Resources," the Master Reuse Plan would result in substantial changes in the visual character of the site when viewed from certain viewpoints along Airport Road. Further, the Master Reuse Plan would increase the density of development on the eastern half of the site. The Master Reuse Plan in combination with existing on-site development and other area development would continue to alter the viewshed. The viewshed would further be altered by construction of the Airport Business Park, and particularly Winery Row, which is adjacent to the southern boundary of the site. In fact, once constructed, it is likely that Winery Row would screen the site to a large degree from drivers traveling north on Airport Road, but this would also add to the overall conversion of the viewshed from pastoral to developed. Mitigation has been recommended for the Master Reuse Plan to minimize impacts to the degree feasible. However, this mitigation would not change the visual conditions such that the existing visual character of the CDCR property would be maintained, and no other feasible mitigation is available to reduce the visual impacts. Therefore, with implementation of recommended mitigation, the project would result in a cumulatively considerable incremental contribution to a cumulatively significant and unavoidable visual impact.

Development adjacent to and near the site is converting the viewshed from largely pastoral to a developed area. Implementation of the Master Reuse Plan would result in substantial changes to views of the CDCR property from Airport Road. Even with implementation of mitigation to reduce the Master Reuse Plan's visual impacts, the visual character of the CDCR property would be substantially altered, contributing to a more urbanized viewshed. The Master Reuse Plan would contribute to the overall change in the viewshed and would result in a cumulatively considerable contribution to a ***significant and unavoidable*** *cumulative visual impact.*

6 OTHER CEQA SECTIONS

6.1 SIGNIFICANT UNAVOIDABLE IMPACTS

6.1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth "in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented." Accordingly, this section provides a summary of significant environmental impacts of the project that cannot be mitigated to a less-than-significant level.

6.1.2 SIGNIFICANT UNAVOIDABLE IMPACTS OF THE PROJECT

Chapter 4, "Environmental Setting, Thresholds of Significance, Environmental Impacts, and Mitigation Measures," provides a description of the potential environmental impacts of the project and recommends various mitigation measures to reduce impacts, to the extent feasible. Chapter 5, "Cumulative Impacts," determines whether the incremental effects of this project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. After implementation of the recommended mitigation measures, most of the impacts associated with the Master Reuse Plan would be reduced to a less-than-significant level. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project's impacts to a less-than-significant level. Chapter 7, "Alternatives," considers alternatives to the project that may be capable of reducing or avoiding some of these impacts.

The significant unavoidable environmental impacts of the proposed project are summarized below.

TRANSPORTATION

4.11-5: Impacts on Intersection Operations at Union Road and SR 46 East Intersection

Implementation of the Master Reuse Plan would result in the exacerbation and further degradation of unacceptable operating conditions at the Union Road and State Route (SR) 46 E intersection during the a.m. and p.m. peak hours and the *Manual on Uniform Traffic Control Devices* (MUTCD) peak-hour signal warrant would be met. This would be a significant impact (Impact 4.11-5). Although mitigation is available to reduce this impact, it is unknown when this mitigation would be implemented. Therefore, for purposes of CEQA, this impact would remain **significant and unavoidable**.

4.11-6: Impacts on Intersection Operations at Airport Road and SR 46 East Intersection

Implementation of the Master Reuse Plan would result in the degradation and exacerbation of unacceptable operating conditions at the Airport Road and SR 46 East intersection during the a.m. and p.m. peak hours and the MUTCD peak-hour signal warrant would be met. This would be a significant impact (Impact 4.11-6). Although mitigation is available to reduce this impact, it is unknown when or if this mitigation would be implemented. Therefore, for purposes of CEQA, this impact would remain **significant and unavoidable**.

4.11-17: Construction-Related Traffic Impacts

With implementation of the Master Reuse Plan, construction traffic could result in significant interim traffic impact to local roadways. Therefore, this impact would be potentially significant. The project's construction impacts would occur on an interim basis during the 28-month construction period. Construction of some of the recommended mitigation measures (i.e., those that are currently under construction by the City or Caltrans, and

the construction of a southbound right-turn pocket at Airport Road and SR 46 East identified in Mitigation Measure 4.11-6) before project construction begins in January 2011 would mitigate the project's construction impacts to a less-than-significant level. However, implementation of many of the intersection improvements is not guaranteed, as they are under City of Paso Robles or Caltrans jurisdiction. Therefore, the project's construction impacts would remain **significant and unavoidable** on an interim basis during construction.

4.11-18: Cumulative Impacts on Operation at the U.S. 101 Southbound Ramps and SR 46 East Intersection

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable Level of Service (LOS D) operations at the U.S. Highway 101 (U.S. 101) Southbound Ramps and SR 46 East intersection during the p.m. peak hour. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-18). No feasible mitigation is available to reduce this impact; therefore, this impact would remain **significant and unavoidable**.

4.11-19: Cumulative Impacts on Operations at the U.S. 101 Northbound Ramps and SR 46 East Intersection

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS E operations at the U.S. 101 Southbound Ramps and SR 46 East intersection during the a.m. and p.m. peak hours. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-19). No feasible mitigation is available to reduce this impact; therefore, this impact would remain **significant and unavoidable**.

4.11-21: Cumulative Impacts on Operations at Golden Hill Road and SR 46 East Intersection

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS D operations during the a.m. peak hour at the U.S. 101 Southbound Ramps and SR 46 East intersection and would degrade operations to LOS E during the p.m. peak hour. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-21). Although mitigation is available to reduce this impact, it is unknown when or if this mitigation would be implemented. Therefore, for purposes of CEQA, this impact would remain **significant and unavoidable**.

4.11-22: Cumulative Impacts on Operation at Union Road and SR 46 East

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the a.m. and p.m. peak hours at the Union Road and SR 46 East intersection. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-22). Although mitigation is available to reduce this impact, it is unknown when or if this mitigation would be implemented. Therefore, for purposes of CEQA, this impact would remain **significant and unavoidable**.

4.11-23: Cumulative Impacts on Operations at Airport Road and SR 46 East Intersection

With implementation of the Master Reuse Plan, project traffic would exacerbate unacceptable LOS F operations during the a.m. and p.m. peak hours at the Union Road and SR 46 East intersection. This would be a significant cumulative impact and the project's contribution would be cumulatively considerable (Impact 4.11-23). Although mitigation is available to reduce this impact, it is unknown when or if this mitigation would be implemented. Therefore, for purposes of CEQA, this impact would remain **significant and unavoidable**.

4.11-27: Cumulative Impacts to Roadway Segments

Implementation of the Master Reuse Plan would further exacerbate unacceptable operating conditions on the SR 46 E segments, between US 101 and Buena Vista Drive and between Union Road and Airport Road. This would be a significant cumulative impact, and the project's contribution would be cumulatively considerable. At this time there are no known feasible improvements that can be implemented that fit the vision of the corridor.

Therefore, this impact would remain cumulatively **significant and unavoidable** and the project's contribution would be considerable.

UTILITIES AND SERVICE SYSTEMS

Wastewater Treatment Capacity

Impact 4.12-1: Wastewater Treatment Capacity Impacts

Implementation of the Master Reuse Plan would not increase wastewater demands beyond the City's available wastewater treatment capacity. No new or expanded wastewater treatment facilities that could result in impacts on the environment would be required. However, the wastewater treatment plant is not in compliance with waste discharge requirements, particularly ammonia (as it relates to wastewater from the project); if the project is operational prior to completion of upgrades to the wastewater treatment plant, it could contribute to violations of the waste discharge requirements. While CDCR would pay its connection fees to fund appropriate facility improvements to address the water quality compliance issues, there is no guarantee that fees will be collected in a manner timely enough to assure the upgrades will be in place by the time the project is operational, even though timely construction is planned. If this were the case, the project would potentially exacerbate the compliance issues, until such time that the plant upgrades are in place and operational. This would, therefore, be a potentially unavoidable significant short-term impact.

Water Supply

4.12-3: Impacts on Water Supplies and Facilities

Water Supply Option 2. CDCR Utilizes City of Paso Robles Municipal Water (Including Groundwater)

Although the *City of Paso Robles 2005 Urban Water Management Plan* (UWMP) indicates that sufficient water supplies are available to serve the Master Reuse Plan under Water Supply Option 2, the UWMP is based on two assumptions that are no longer valid: availability of 8,000 acre-feet per year (afy) of Lake Nacimiento water and use of recycled water. The UWMP indicates that if these water sources are not available, the supply would be made up by continued use of groundwater, which would continue the decline of groundwater levels in the Estrella subarea and the larger Paso Robles Groundwater Basin. Although the currently committed 4,000 afy of Lake Nacimiento water would reduce the groundwater decline by 59%, because the basin is nearing potential overdraft conditions and these conditions are projected to exist when the project begins operation, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in overdraft. This would be a significant project (Impact 4.6-3b) and cumulative impact. Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

Water Supply Option 3. CDCR Continues Use of On-Site Wells

Pumping additional groundwater to serve the site under the Master Reuse Plan would contribute to the current chronic decline of groundwater in the area. Although use of the currently committed 4,000 afy of Lake Nacimiento water would reduce the local groundwater decline by 59%, implementation of the Master Reuse Plan could contribute to increased pumping of groundwater in a basin in overdraft. This would be a significant project (Impact 4.6-3c) and cumulative impact. Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

VISUAL RESOURCES

Visual Character

4.13-2: Potential to Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

From Viewpoint 4, implementation of the Master Reuse Plan would result in substantial changes of views of the site, including changing views from a more school yard/facility appearance to a correctional institution. This would be a significant project (Impact 4.13-2d) and cumulative impact. Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

From Viewpoint 5, implementation of the Master Reuse Plan would result in substantial changes to views of the site, including densification of fencing and on-site building and the removal of on-site trees. This would be a potentially significant project and cumulative impact (Impact 4.13-2e). Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

From Viewpoint 6, implementation of the Master Reuse Plan would substantially alter the visual setting by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. This would be a significant project (Impact 4.13-2f) and cumulative impact. Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

From Viewpoint 7, implementation of the Master Reuse Plan would substantially alter the visual setting by introducing a higher density and larger development footprint, which would change the character of the site from a more rural/undeveloped appearance to a more institutional appearance. Further views of distant hillside and ridgeline areas would be almost completely blocked from this viewpoint. This would be a significant project (Impact 4.13-2g) and cumulative impact. Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

Overall, the CDCR property would take on the appearance of a more densely developed facility. It would more obviously be a correctional facility, with security fencing dominating much of the viewshed. Given the site's location within a visual gateway to the city of Paso Robles, this would be a significant impact (Impact 4.13-2h). Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

Nighttime Lighting

4.13-3: New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

Implementation of the Master Reuse Plan would substantially alter the areas lit and intensity of lighting on-site. When viewed from more distant areas, the lighting associated with proposed facilities could appear to increase skyglow in the area because the existing site is currently relatively dark (even though in the past pole-mounted lighting was used for the former Division of Juvenile Justice [DJJ] facility). Therefore, the nighttime visual setting can be considered to substantially change with implementation of the Master Reuse Plan. This would be a **significant** project (Impact 4.13-3) and cumulative impact. No additional feasible mitigation is available to reduce this impact; therefore, this impact would remain s**ignificant and unavoidable**.

6.2 GROWTH INDUCEMENT

6.2.1 STATE CEQA GUIDELINES

State CEQA Guidelines Section 2100(b)(5) specifies that growth-inducing impacts of a project must be addressed in an EIR. Section 15126(d) states that a proposed project is growth-inducing if it could "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Included in the definition are projects that would remove obstacles to population growth. Examples of growth-inducing actions include developing water, wastewater, fire, or other types of services in previously unserved areas; extending transportation routes into previously undeveloped areas; and establishing major new employment opportunities. The following is a summary of the direct and indirect growth-inducing impacts that could result with implementation of the Master Reuse Plan.

6.2.2 GROWTH-INDUCING IMPACTS OF THE PROJECT

Project construction could foster some limited short-term economic growth associated with construction employment opportunities and operation of the facility would foster some long-term economic growth associated with new permanent employment opportunities (up to 989 positions). Operation of the facility would foster long-term growth in three ways: (1) direct growth related to employment at the prison, (2) growth related to induced employment resulting from jobs created to serve prison employees, and (3) growth resulting from prison expenditures.

CDCR estimates that each correctional job creates approximately 0.5 indirect (secondary) job, through payrolls and the purchase of local goods and services. Based on the wide geographic distribution of past DJJ and CAL FIRE employee residences and given that the majority of induced jobs would require skill levels that could be provided by existing residents of the region (i.e., Paso Robles, San Luis Obispo County, and nearby cities and towns), induced employment is not anticipated to have a substantial effect on population growth. The project itself would not substantially increase population growth in the surrounding region because it would not construct new housing, would not remove barriers to population growth in the vicinity through the construction of new public infrastructure, and would be located within the grounds of the CDCR property. The Master Reuse Plan would not require the extension or expansion of local public infrastructure facilities, except as needed to serve the site; utilities would not be extended to currently unserved areas. The Master Reuse Plan is not likely to tax existing community service facilities on a city and community level because of the wide geographic distribution of past DJJ and CAL FIRE employee residences.

Although the Master Reuse Plan would increase wastewater flows, adequate treatment capacity is available from the City. Further, because of the dispersed nature of the geographic distribution of existing and anticipated future employees, the indirect increase in wastewater flows as a result of the in-migration of new CDCR or CAL FIRE employees relocating to nearby communities is not anticipated to substantially affect the infrastructure or treatment capacity of any one wastewater treatment entity such that expansion of existing infrastructure would be required above and beyond what is currently planned for by these agencies.

Although the Master Reuse Plan would increase potable-water demands, CDCR would secure potable water from the City; therefore, adequate water supplies are available to serve the Master Reuse Plan facilities. Further, because of the dispersed nature of the geographic distribution of existing and anticipated future employees, the indirect increase in water demands as a result of the in-migration of new CDCR employees relocating to nearby communities is not anticipated to substantially affect the infrastructure or water supplies of any one water purveyor such that expansion of existing infrastructure or new water entitlements would be required, above and beyond what is currently planned for by these agencies.

Although the Master Reuse Plan would foster some economic and population growth associated with new employment opportunities at the facility, this growth would not substantially affect the ability of public services

providers to serve their existing customers, nor would it require the construction of new facilities to serve the Master Reuse Plan. This growth would be widely dispersed throughout several cities, communities, and the county, and would not result in an increased demand for housing in these areas. The population and employment growth expected with implementation of the project would not exceed the projections of local general plans in the communities surrounding the CDCR property.

7 ALTERNATIVES TO THE PROJECT

The State CEQA Guidelines (Section 15126.6[a]) require an evaluation of "a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects, and evaluate the comparative merits of the alternatives." The purpose of the alternatives analysis is to determine whether or not a variation of the project would reduce, or eliminate, significant project impacts, within the basic framework of the project's objectives.

Thus, alternatives considered in an EIR should be potentially feasible, and should attain most of the basic project objectives. The term "potentially" feasible is used, because this EIR reflects CDCR staff's determination of alternatives that may be feasible; ultimately, the determination of feasibility is made by the project decision maker, the Secretary of CDCR, after balancing technical, legal, social, and environmental factors. As described in Section 3.2, "Project Objectives," the primary objective of the proposed *Paso Robles Property Master Reuse Plan* (Master Reuse Plan) project is to use existing assets of the state to the extent feasible in order to create space for inmate programs that address current and projected shortages of bed capacity and that safely and securely house inmates in California. Other primary objectives include providing enhanced rehabilitation programs for inmates who will soon be released from prison, and providing enhanced wildfire protection in the overall region and throughout the state.

The proposed project is intended to achieve the following additional objectives:

- Implement the goals set forth in the Public Safety and Offender Rehabilitation Services Act of 2007 to increase male adult inmate prison capacity and associated support and program space to reduce overcrowding and improve living conditions for inmates. The reduction in prison overcrowding also improves security standards for staff, inmates, and the California communities;

- Utilize the existing facilities, infrastructure, and available land within the former DJJ facility for conversion to a facility that can house adult Level II male inmates. The basic design of the existing buildings and dormitories within this former DJJ facility can be readily converted to house adult male inmates once additional perimeter security measures are implemented;

- Utilize other available land within the state-owned Paso Robles parcel for the construction of a secure reentry facility that will serve the County of San Luis Obispo and two adjacent counties. The goal of the reentry facility is to better prepare inmates for successful return to the community of their last legal residence and to reduce the potential for recidivism. The proposed reentry facility will provide housing and training areas to allow CDCR to achieve its goal of providing substantive work, academic education, vocational training, and specialized behavioral treatment of inmates prior to their scheduled parole;

- In the short term, provide a means of reactivating a former CAL FIRE institutional-based conservation camp to support regional wildfire containment and protection of people, property, and resources potentially exposed to wild lands fires. In the long-term, use available state-owned property within the Paso Robles parcel for the development of a permanent, full service, conservation camp with dormitories and related support buildings that can house a year-around crew of approximately 130 Level I inmates. These inmates would live within the camp instead of returning to a correctional facility each day;

- Provide an opportunity for the long-term enhancement and replacement of native habitat through the use of existing on-site land and inmate conservation crews;

- Provide new or renovated correctional and conservation camp facilities that meet or exceed current energy and building code standards including features that reduce energy and water consumption; and

- Provide an opportunity to regain or exceed previous employment levels on the Paso Robles parcel.

7.1 RANGE OF ALTERNATIVES CONSIDERED

The range of alternatives studied in the EIR is governed by the "rule of reason," requiring evaluation of only those alternatives "necessary to permit a reasoned choice" (State CEQA Guidelines, Section 15126.6[f]). Further, an EIR "need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (State CEQA Guidelines, Section 15126.6[f][3]). The analysis should focus on alternatives that are potentially feasible (i.e., that may be accomplished in a successful manner within a reasonable period of time) and that take economic, environmental, social and technological factors into account. Alternatives that are remote or speculative need not be discussed. Furthermore, the alternatives analyzed for a project should focus on reducing or avoiding significant environmental impacts associated with the project as proposed.

The State CEQA Guidelines (Section 15126.6[e]) require that, among other alternatives, a "no-project" alternative be evaluated in comparison to the project and that it "discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with the available infrastructure and community services." Accordingly, a no project alternative is analyzed in this DEIR.

As described in Chapter 3, "Project Description," in response to a current and projected deficiency in the number of male inmate beds in the statewide prison system, the California Legislature passed the Public Safety and Offender Rehabilitation Services Act of 2007. This law authorizes CDCR to design, construct, or renovate prison housing units, prison support buildings, and programming space to add up to 16,000 beds in phases at CDCR facilities. The Public Safety and Offender Rehabilitation Services Act also authorized the construction of Central Coast Regional Secure Community Reentry Facilities (SCRF) and treatment space for inmates in need of mental health and substance abuse treatment services. The law provides for CDCR to establish county and/or regionally based reentry facilities throughout the state that will house a total of up to 16,000 inmates.

The former Paso Robles Juvenile Facility was closed in July 2008 in response to a substantial statewide decline in the number of youthful offenders (wards) sentenced to state facilities. CDCR believes the former Division of Juvenile Justice (DJJ) site represents a potentially unique opportunity to reuse existing correctional facilities on state-owned land to help reduce overcrowding in the state prison system. This reuse opportunity may render an alternative location for the proposed Level II and CAL FIRE portions of the project infeasible, because one of the primary objectives of the project is to reuse existing state assets to reduce the overall costs to California taxpayers.

However, this alternatives analysis also reflects the memorandum of understanding among the Counties of San Benito, Santa Barbara, and San Luis Obispo; the City of Paso Robles (City); and CDCR regarding the proposed reentry facility. The MOU provides support for locating the reentry facility within Paso Robles "in the vicinity" of what is now the proposed Estrella site (former El Paso de Robles Youth Correctional Facility), subject to certain conditions, including a commitment to transport parolees from the reentry facility to a designated release location in the relevant MOU county of commitment. The MOU specifically requires compliance with CEQA, including considerations of feasible alternative configurations and locations, before approval of the reentry facility.

The project objectives and the MOU are factors that were used to develop and evaluate a reasonable range of alternatives that could reduce or avoid the project's significant impacts, as required by CEQA. The project is a Master Reuse Plan for the site. The following alternatives were selected for evaluation:

- No Project
- Mitigated Design
- Reduced Development. Two alternatives are considered in this analysis:
  - Estrella and CAL FIRE Conservation Camp Only
  - Reentry Facility and CAL FIRE Conservation Camp Only
- Alternative Site for Reentry Facility

Normally, alternative sites would be completely inconsistent with the concept and objective for master reuse of this site. This is especially true as it relates to the proposed Estrella Adult Correctional Facility (Estrella Facility) (reuse of the juvenile detention facility), reactivation of the CAL FIRE facilities, and habitat restoration. Thus, an alternative site for this part of the project would still allow reuse of a large component of project facilities. The reentry component, by contrast, would be a new facility developed on a vacant area of the site. In consideration of this and the MOU, an alternative site is considered, as explained above, for the reentry facility. Because the reentry facility serves the counties of Santa Barbara, San Luis Obispo, and San Benito, an alternative site would be limited to those locations. It must be recognized that if the site (or portions of the site) were left unused over the long term, the state might be under pressure to "surplus" the property (although this would require action by the Legislature), in which case it could ultimately be subject to a potential different use. However, any scenarios involving surplus lands are speculative, and an analysis is not included in this EIR, consistent with Section 15145 of the State CEQA Guidelines (regarding speculation).

Descriptions of project alternatives are provided below. The advantages and disadvantages of each, compared to the project, are presented , and an evaluation of each alternative's ability to meet most of the project's basic objectives is included. Any significant environmental impacts created exclusively by an alternative are also identified. Finally, a summary of the impacts for each resource area, as compared to the project, is provided at the end of each discussion (i.e., less, greater, or similar).

A more detailed description of the baseline conditions, evaluation methodology, and results are included in Chapter 4 of this DEIR and in technical reports prepared as part of the evaluation.

7.2 SUMMARY OF ENVIRONMENTAL IMPACTS

The purpose of this section is to summarize the site-specific environmental constraints, as identified and discussed in Chapter 4, "Environmental Setting, Thresholds of Significance, Environmental Impacts, and Mitigation Measures," of this DEIR. Site-specific environmental constraints and their effects on the range of alternatives considered in this DEIR are discussed below. Issues (e.g., land use) that would not result in any significant effects are not included in this summary.

As discussed in Section 4.1, "Air Quality," the Master Reuse Plan could generate construction-related and operational emissions that would exceed the San Luis Obispo Air Pollution Control District (SLOAPCD) significance thresholds. Regarding climate change, the Master Reuse Plan could generate greenhouse gas (GHG) emissions that would be considered cumulatively considerable. Mitigation measures are available to reduce these impacts to a less-than-significant level.

As discussed in Section 4.2, "Biological Resources," the Master Reuse Plan would result in the death of an undetermined number of animals (mostly birds) during the operation of the proposed lethal electrified fence. CDCR has proposed specific mitigation measures and will consult with the U.S. Fish and Wildlife Service and California Department of Fish and Game to refine the measures to minimize wildlife electrocutions to the extent feasible and compensate for impacts on native wildlife species. The Master Reuse Plan would also result in a potentially significant impact on sensitive habitats with the loss of native oak trees. The loss of mature oak trees would result in the loss of nesting sites for common and special-status raptors. The Master Reuse Plan may also result in the potential loss of burrowing owl habitat. With implementation of recommended mitigation, these impacts would be reduced to a less-than-significant level.

As discussed in Section 4.3, "Cultural Resources," although no "unique" or "historic" cultural resources (per CEQA definitions) have been documented on the CDCR property, there is the potential that unrecorded cultural resources could be unearthed or otherwise discovered at the project site during ground-disturbing activities. In addition, the site could contain buried subsurface human remains. Mitigation is available to reduce these cultural resources impacts to a less-than-significant level.

As discussed in Section 4.6, “Hazards and Hazardous Materials,” implementation of the Master Reuse Plan could expose construction workers and the environment to hazardous chemicals or materials in on-site soils and/or aged onsite buildings. In addition, the Master Reuse Plan would increase the number of buildings and structures at the CDCR property (i.e., two observation towers, pole-mounted lights, and lethal electrified fences) that implicate height limits established to prevent airport obstructions. With implementation of recommended mitigation, these impacts would be reduced to a less-than-significant level.

As discussed in Section 4.7, “Hydrology and Water Quality,” construction activities during project implementation could result in the introduction of sediment and other nonpoint source pollutants into on-site drainage channels and ultimately offsite drainage channels. Implementation of the Master Reuse Plan would increase the amount of impervious surfaces onsite, thereby increasing both the total volume and the peak discharge rate of stormwater runoff. These increases could cause the capacity of onsite stormwater systems to be exceeded, resulting in greater potential for on- and offsite flooding. Mitigation is available to reduce these hydrology and water quality impacts to a less-than-significant level.

As discussed in Section 4.9, “Noise,” the Master Reuse Plan could generate construction-related noise that is incompatible with nearby noise-sensitive receptors. In addition, generators located at proposed facilities without additional shielding could exceed stationary-noise-source criteria. Mitigation is available to reduce these noise impacts to a less-than-significant level.

As discussed in Section 4.11, “Transportation,” project operation would result in adverse project and cumulative impacts on specific highway ramps, intersections, and roadway segments. Although mitigation would reduce most of these impacts to a less-than-significant level, some would be considered significant and unavoidable and the project’s contribution would be considerable.

As discussed in Section 4.12, “Utilities,” the project would produce a total of 0.16 million gallons per day (mgd) of wastewater, which is 0.09 mgd above its agreement for wastewater flows associated with operation of the prior DJJ facility. This additional flow can be accommodated within the City’s wastewater treatment plant’s capacity, but it would contribute to the plant’s current exceedance of waste discharge requirements at the plant. The plant is planned to be upgraded to resolve this issue by 2013, around the time the project would become operational. However, if the plant upgrades are not completed prior to project operations commencing, a short-term significant impact to water quality could occur. Further, the project would use an estimated 219 acre-feet per year (afy) of water. If CDCR is successful working with the City or the San Luis Obispo County Flood Control and Water Conservation District to procure an equal amount of imported water from Lake Nacimiento (this water is available), there would not be a significant water supply impact. However, if it is not successful, CDCR would either rely on a mix of City water, including groundwater, or use onsite wells and pump water from the groundwater table. This would contribute to an existing groundwater drawdown problem that is approaching an overdraft condition, and would be a significant impact.

As discussed in Section 4.13, “Visual Resources,” implementation of the project would result in adverse and substantial impacts on some viewpoints along Airport Road (i.e. Viewpoints 4, 5, 6, and 7) and would substantially alter the intensity of lighting onsite as well as the nighttime viewshed along a portion of Airport Road. Impacts would be substantially reduced by implementation of proposed mitigation measures, but would remain significant and unavoidable.

With regard to geology and paleontological impacts, these impacts are generally site specific. Further, the Master Reuse Plan would not result in significant impacts to these resources with implementation of recommended mitigation; therefore, none of the alternatives could reduce or eliminate this impact. This issue is not discussed further in this section.

The potential for the alternatives to avoid or reduce the project’s significant impacts is considered in this analysis of alternatives.

7.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Section 15126.6(c) of the State CEQA Guidelines provides that an EIR "should also identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination."

One alternative considered but rejected from consideration is an alternative that would reduce the number of inmates in the state prison system to the extent that new prison beds are not needed. This alternative was rejected for the following reasons:

- The state prison system is severely overcrowded. Even a substantial reduction in the number of incarcerated people would not eliminate the need to provide additional bed space for inmates throughout the system.
- The long-term trend over the last 30 years has shown consistent increases in the number of incarcerated people. Legislation and voter initiatives have generally addressed crime by lengthening prison sentences and, at the same time, California's population has grown. This combination suggests that it is unlikely, and it is not projected, that the demand for prison space will diminish in the foreseeable future.
- Actions that would substantially reduce the number of inmates in the prison system would likely require legislation. Because there is no such legislation, this consideration is legally infeasible. Further, if any such legislation is passed, it would need to result in a dramatic reduction in the number of inmates to eliminate the need for additional beds.

Another alternative considered and rejected is the placement of the entire project on another site, within the county of San Luis Obispo, San Benito, or Santa Barbara, that contains no other prison facilities. In addition to the fact that existing state assets would not be reused, construction of the Master Reuse Plan on an undeveloped site would result in substantially greater impacts and costs than those anticipated from the project. For example, a new prison facility would require the development of previously undeveloped lands resulting in new or substantially greater biological and cultural resource impacts and greater overall construction impacts (such as to air quality and noise), and substantially more facilities would need to be built. The proposed Master Reuse Plan would be located at a former DJJ facility where almost all existing buildings and roads could be reused and substantial support infrastructure is already present. The construction of more buildings and related infrastructure would be needed under this alternative and would result in substantially greater construction-related impacts in the areas of construction-related air quality, noise, and hydrology and water quality. Further, this alternative would not attain a central objective of the project: reuse of existing state assets. Finally, the 2007 Act only allows CDCR to add new inmate beds at "facilities under its jurisdiction" (Gov. Code § 15819.40(a)(1)(A). For these reasons, this alternative was rejected from further consideration.

A final alternative that was considered and rejected was reuse of another state site with existing reusable assets (i.e., infrastructure and reusable buildings, such as at the CDCR property) within the county of San Luis Obispo, San Benito, or Santa Barbara. This alternative was rejected because there are no such sites, except the CDCR property.

7.4 ALTERNATIVES CONSIDERED FOR DETAILED EVALUATION

The analysis presented below evaluates five alternatives to the project:

- No Project (No Development)
- Mitigated Design
- Reduced Development. Two alternatives are considered in this analysis:
  - Estrella and CAL FIRE Conservation Camp Only
  - Reentry Facility and CAL FIRE Conservation Camp Only

- Alternative Site for Reentry Facility

These alternatives were selected based on their ability to reduce or avoid the project's significant and significant and unavoidable impacts based on the constraints identified in Section 7.2, "Summary of Environmental Impacts." Although the number of alternatives considered is relatively limited, given the nature of the project, the range of alternatives is reasonable. Because the basic objectives of the project involve prison facilities, it would be infeasible to evaluate alternatives that are inconsistent with this objective, and the alternatives considered herein, all designed to reduce the impacts of the project and provide a reasonable range for decision making.

7.4.1 NO PROJECT (NO DEVELOPMENT) ALTERNATIVE

Under this alternative no actions would be taken at the CDCR property. No development of the site or reuse of the former DJJ facility would occur. Current, highly limited CAL FIRE operations would continue onsite. Under this alternative, the Public Safety and Offender Rehabilitation Services Act of 2007's goal of increasing male adult inmate capacity and associated program and support space would not be met at the site, and bed shortages throughout the prison system would not be reduced. CDCR would be required to meet its needs for the beds it would have provided at the site at another prison site in the state prison system and a reentry facility would need to be constructed on a different site within the county of San Luis Obispo, San Benito, or Santa Barbara to serve the anticipated number of inmates annually paroled to these three respective counties.

Consistent with CEQA requirements, the No Project (No Development) Alternative is evaluated in this DEIR. The No Project (No Development) Alternative would not meet the project's basic objective to create prison housing units, prison support buildings, and inmate programming space to address current and projected shortages of celled capacity to safely and securely house inmates in California.

ENVIRONMENTAL ANALYSIS

Air Quality and Climate Change

This alternative would not include any new development, and thus would not generate new construction or operations-related air emissions. The Master Reuse Plan could generate construction-related and operational emissions that would exceed the SLOAPCD significance thresholds. Regarding climate change, the Master Reuse Plan could generate cumulatively considerable GHG emissions. All other impacts would be reduced to less-than-significant levels after implementation of recommended mitigation. Nonetheless, because this alternative would avoid all air quality and climate impacts, this alternative would result in less impact. *[Less, significant reduction to cumulatively considerable GHG emissions]*

Biological Resources

The No Project (No Development) Alternative would not include any development of the CDCR property. Further, this alternative would not result in the construction of a lethal electrified fence, which could result in adverse impacts on migratory bird populations. The Master Reuse Plan would result in a potentially significant impact on sensitive habitats with the loss of native oak trees. The loss of mature oak trees would result in the loss of nesting sites for common and special-status raptors. Project development could also result in the potential loss of burrowing owl habitat. However, these impacts would all be reduced to less-than-significant levels after implementation of recommended mitigation. Nonetheless, because this alternative would avoid all biological impacts, including impacts on bird species and sensitive habitats, this alternative would result in less impacts on biological resources. *[Less, but no significant reduction]*

Cultural Resources

This No Project (No Development) Alternative would not include any development of the CDCR property, and would not disturb any potentially undiscovered cultural resources on the site. By comparison, the Master Reuse Plan would result in potentially significant impacts on undiscovered cultural resources as a result of project construction activities. However these impacts would be reduced to less-than-significant levels after implementation of recommended mitigation. Nonetheless, because this alternative would avoid potential impacts on undiscovered cultural resources, overall impacts would be less than impacts under the project. *[Less, but no significant reduction]*

Employment, Population, and Housing

Under this alternative, the number of employees at the site would not increase. As a result, this alternative would not have any effects on local and regional employment, population, or housing opportunities. By comparison, the Master Reuse Plan would increase the number of employees at the site (i.e., 998 new employees). Project-related population growth and associated demands for housing and employment opportunities would be absorbed in growth projections of regional and local communities and would not substantially increase demand for housing in any one area. Because the Master Reuse Plan would not result in any significant employment, population, and housing impacts, this alternative would not reduce any significant impacts of the project. *[Similar]*

Hazards and Hazardous Materials

This alternative would not include any new development, and thus would not generate new construction that could expose construction workers and the environment to hazardous chemicals or materials or increase the number of nonconforming (FAA standards) buildings and structures at the CDCR property. By comparison, the Master Reuse Plan could expose construction workers and the environment to hazardous chemicals or materials in on-site soils and/or aged on-site buildings and would increase the number of buildings that exceed height obstruction standards associated with the adjacent airport. However, all impacts would be reduced to less-than-significant levels after mitigation. Because the proposed project would not result in any significant hazards and hazardous materials impacts after mitigation, this alternative would not reduce any significant impacts of the project. *[Similar]*

Hydrology and Water Quality

Under the No Project (No Development) Alternative, no new construction would occur; therefore, there would be no potential construction-related releases of sediment and contaminants to nearby waterways. By comparison, the Master Reuse Plan would result in construction activities that could disturb onsite soils and result in the discharge of sediment, degrading water quality. However, mitigation recommended in the DEIR would reduce the project's impact to a less-than-significant level. Although impacts would be less than significant, this alternative would result in no discharge of sediment or contaminants; therefore, this alternative's water quality impacts would be less than those associated with the project. *[Less, but no significant reduction]*

Land Use and Planning

Under this alternative, development and reuse of a correctional facility to securely house Level II male inmates would not occur and the CDCR property would remain as it currently exists. No significant land use impacts were identified for the Master Reuse Plan, so this alternative would not reduce or avoid any significant land use impacts associated with the project, and impacts would be similar. *[Similar]*

Noise

This alternative would not involve the construction of new or modified facilities. This alternative would avoid the Master Reuse Plan's construction-related noise impacts and the potential for generators associated with proposed

facilities to exceed stationary-noise-source criteria. However, mitigation recommended in the DEIR would reduce the impact to a less-than-significant level. The Master Reuse Plan would not substantially affect operational traffic noise levels along area roadways, so this alternative would not be substantially different but would generate slightly less traffic noise and stationary noise than the project. *[Less, but no significant reduction]*

Public Services

Because no new facilities would be constructed under the No Project (No Development) Alternative, no inmates and no additional staff would be added to the site. Therefore, demands for public services under this alternative would not change compared to existing conditions. By comparison, the Master Reuse Plan would increase demands for public services at the site; however, the project's increased demands for public services would not result in any significant impacts on these resources. Nonetheless, overall public service impacts would be less under this alternative. *[Less, but no significant reduction]*

Transportation

This No Project (No Development) Alternative would not result in development of any new facilities or in any construction-related transportation impacts. This alternative would not increase the number of employees at the site, and as a result, would not generate any new traffic. By comparison, project-related traffic would add traffic to existing roadways, resulting in adverse project and cumulative impacts on some highway ramps, intersections, and roadway segments in the vicinity. Although mitigation would reduce most of these impacts to a less-than-significant level, some would be considered significant and unavoidable and the project's contribution would be cumulatively considerable. Because this alternative would avoid any increase in roadway traffic, overall traffic impacts would be less than the project. *[Less, would eliminate significant and unavoidable impacts]*

Utilities and Service Systems

Because no new facilities would be constructed and no existing facilities would be repurposed under the No Project (No Development) Alternative, this alternative would not increase demand on area wastewater treatment plants and water supply systems. By comparison, the Master Reuse Plan would increase demands for utilities and service systems at the site and could (if the City's wastewater treatment plant upgrades are not completed) contribute to significant short-term impacts to treated wastewater quality. Also, a new sewer line would be needed. Further, the Master Reuse Plan as proposed either would require an increase in delivery of imported Lake Nacimiento water or would contribute to significant drawdown of the groundwater table. Therefore, overall utilities and service systems impacts would be less under this alternative. *[Less, potentially significant and unavoidable impact on short-term treated wastewater quality and groundwater would be avoided]*

Visual Resources

Under this alternative, the CDCR property would not be developed and no additional fencing, buildings, structures, or lighting would be required. The visual setting of the site would not be altered. However, if existing vacant facilities and landscaping are not maintained, it is likely that over time they could fall into disrepair and become blighted because of limited funding to maintain these buildings and grounds. Current lighting at the site would remain minimal. Therefore, skyglow would not increase compared to existing conditions. By comparison, the Master Reuse Plan would result in the installation of lighting sources and use of existing lighting sources that are not presently used to support programming activities and to provide site safety and security. Significant light and glare impacts would occur under the project. Under this alternative, overall lighting levels on the CDCR property would be less. *[Less, would eliminate significant and unavoidable impacts; however, would create potential for other significant visual impacts because of decay]*

Conclusion

The No Project (No Development) Alternative would be environmentally superior to the Master Reuse Plan with respect to the following issues: air quality and climate change, biological resources, cultural resources, hydrology and water quality, noise, public services, transportation, utilities and service systems, and visual resources. It would eliminate significant and unavoidable cumulative air quality impacts and project and cumulative impacts on some highway ramps, intersections, and roadway segments in the vicinity, and potential short-term treated wastewater quality and groundwater table drawdown impacts. It would be similar to the project with respect to employment, population, and housing; hazards and hazardous materials; and land use and planning. Overall, this alternative is environmentally superior to the proposed project.

This alternative would not attain any of the objectives of the project.

7.4.2 MITIGATED DESIGN ALTERNATIVE

In consideration of the requirements set forth by CEQA and the State CEQA Guidelines, the Mitigated Design Alternative is intended to reduce the significant and significant and unavoidable impacts of the project. As described above, significant impacts associated with the Master Reuse Plan would generally come from impacts on existing visual character (Viewpoints 4, 5, 6, and 7) and nighttime views; impacts on biological resources (e.g., loss of native oak trees, waters of the United States, nesting sites); construction, operational, and GHG-related air emissions; construction and operational noise impacts; traffic impacts; water quality impacts; potential short-term treated wastewater quality impacts; potential water supply and groundwater impacts; and potential impacts on cultural resources.

In evaluating how these impacts could be reduced through a mitigated design alternative, it is important to understand which elements of the Master Reuse Plan have sufficient flexibility to accommodate modified designs to avoid identified impacts. In the case of impacts related to air quality, cultural resources, hydrology and water quality, noise, traffic, and nighttime lighting impacts, these impacts are primarily a direct function of the size of the proposed facilities, the area of the construction footprint, and the number of inmates and employees that would be located at the facility.

The Master Reuse Plan is being proposed by CDCR to meet a legislative mandate to provide adult male inmate housing and reentry facilities throughout the CDCR prison system. One option for avoiding impacts such as these would be to relocate the facilities to an alternate location where these impacts would not occur. Please see the discussion in Sections 7.1 and 7.3 regarding off-site location considerations.

The other option would be to see if the size of the project at the CDCR property could be reduced in some way so as to avoid or substantially lessen the impacts that would occur. This is addressed in Sections 7.4.3 and 7.4.4. Note that the proposed project is one of many needed to help the state meet its inmate capacity needs, and is crucial to providing the necessary capacity to meet the goals of the Public Safety and Offender Rehabilitation Services Act of 2007CDCR believes the project site, which includes facilities from a former DJJ facility and ongoing CAL FIRE operations, represents a potentially unique opportunity to reuse existing housing and support facilities on state-owned land to help reduce overcrowding in the state prison system.

Regarding biological impacts, some of the Master Reuse Plan's components could be relocated to avoid removal of sensitive habitats (i.e., a proposed visitor parking lot in the southwest portion of the site that would result in fill of an ephemeral drainage). However, the project would still result in removal of some native oaks located near the proposed lethal electrified fence line (to avoid being a wildlife attractant or an aid to inmate escape) and within the footprints of proposed Estrella buildings. In addition, the project would still result in the same impacts on common and special-status animals (primarily birds) because a lethal electrified fence would be required in the design of the facility. Therefore, impacts related to removal of native oaks and associated nesting sites and animals (primarily birds) associated with the operation of a lethal electrified fence could not feasibly be avoided.

Regarding wastewater and water impacts, these issues are outside the control of CDCR, and CDCR is proposing to mitigate these impacts by paying sewer connection fees toward treatment plant upgrades (through payment of sewer connection and meter fees) and by procuring an entitlement to additional Lake Nacimiento water. There are no alternatives that would otherwise resolve these impacts, (if, indeed, they remain unresolved) other than the No Project alternative.

The remaining issue that could be addressed would be moving proposed CAL FIRE facilities to another location on the CDCR property to reduce adverse impacts on the existing visual character of the site and its surroundings from Viewpoints 4, 5, 6, and 7. It is noted that the view from Viewpoint 4, which is of the Estrella Facility, cannot be altered by moving facilities. The visual impact is primarily from the electrified fence, and moving it would compromise the security of the facility; therefore, this is not a feasible decision option because of security considerations.

The purpose of the Mitigated Design Alternative evaluated herein is to identify the environmental impacts that would occur if project components in the Master Reuse Plan were shifted or redesigned with modified building footprints within the CDCR property. Exhibit 7-1 identifies the proposed location of alternate on-site locations that could support the proposed CAL FIRE camp facilities and the proposed Estrella Facility visitor parking lot and reduce impacts on visual and biological resources, and hydrology and water quality. These locations would serve to reduce the significant impacts identified for the proposed project. As shown in the exhibit, the proposed visitor parking lot would be relocated to the north of the proposed staff parking lot in an area that does not support drainages. The proposed CAL FIRE buildings would be shifted to the west to be further set back from Airport Road. Existing CAL FIRE buildings would remain in their existing locations. The proposed CAL FIRE ball field/recreation area would be located near Airport Road. This alternative would attain all project objectives.

ENVIRONMENTAL ANALYSIS

Air Quality and Climate Change

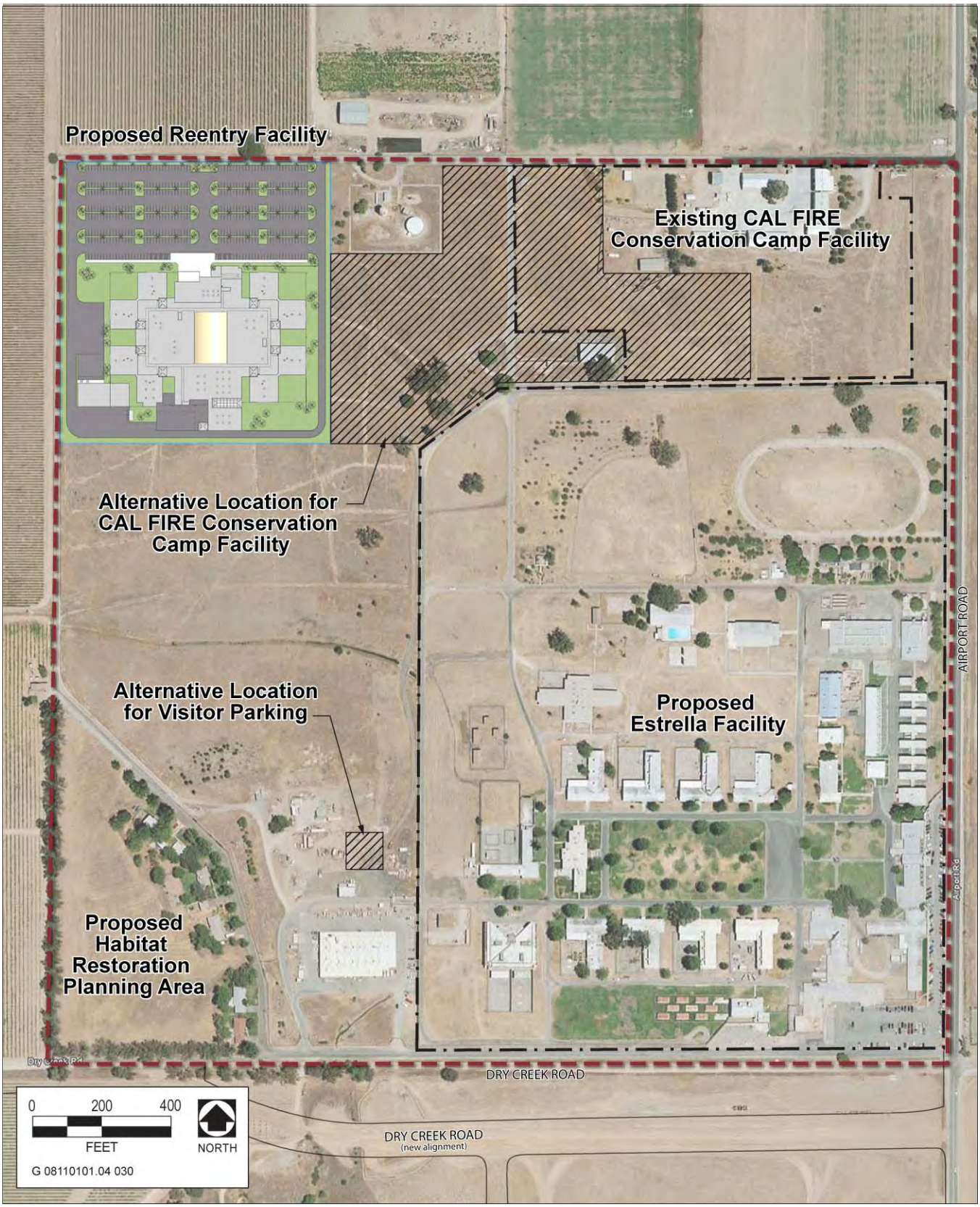
Implementation of this alternative would result in the same demolition and construction activities as the project. Similar to the project, construction-related emissions under this alternative would contribute to regional cumulative impacts. The project could generate construction-related and operational emissions that would exceed SLOAPCD significance thresholds. Regarding climate change, the Master Reuse Plan could generate cumulatively considerable GHG emissions. All other impacts would be reduced to less-than-significant levels after implementation of recommended mitigation. Because it is likely that this alternative would generate the same or comparable construction-related, operational, and GHG emissions as the project (because the same amount of construction would occur on-site), this alternative would have similar air quality impacts. *[Similar]*

Biological Resources

This Mitigated Design Alternative would include development of CAL FIRE buildings farther west of the current location. This area is generally undeveloped and undisturbed. Thus, the potential exists for greater impacts on habitat and sensitive species. However, mitigation recommended for the project would reduce these potential impacts to a less-than-significant level. Under this alternative, a lethal electrified fence would also be constructed; therefore, this alternative would result in similar impacts on bird species as the project. Overall, this alternative would result in less impacts on biological resources than the project, because it would avoid impacts on the ephemeral drainage. *[Similar but less]*

Cultural Resources

Under the Mitigated Design Alternative, no previously discovered cultural resources would be disturbed on the site, because all areas of the CDCR property have been surveyed and none are located in the areas proposed for construction under this alternative. This alternative would likely result in the same potentially significant impacts on previously undiscovered cultural resources; however, these impacts would be reduced to less-than-significant



Source: Data compiled by Ascent Environmental, Inc. in 2010.

Representative Design Elements **Exhibit 7-1**

levels after implementation of mitigation recommended for the proposed project. Overall, impacts would be similar to impacts of the project. *[Similar]*

Employment, Population, and Housing

Under the Mitigated Design Alternative, the number of employees required for operations would be the same as the project. No significant employment, population, and housing impacts were identified for the project, so this alternative would not alter any conclusions regarding employment, population, and housing impacts. *[Similar]*

Hazards and Hazardous Materials

Under this alternative, CAL FIRE operations and a Estrella Facility parking lot would be relocated to different undeveloped areas of the site. However, all the same proposed Master Reuse Facilities would be constructed on-site. Therefore, this alternative would result in the same hazards and hazardous material impacts as the project, including the potential to expose construction workers and the environment to hazardous chemicals or materials in on-site soils and/or aged on-site buildings and to result in an increase in the number of buildings that exceed height obstruction standards associated with the adjacent airport. With implementation of mitigation similar to the mitigation recommended for the proposed project, these impacts would be reduced to a less-than-significant level. Therefore, hazards and hazardous materials impacts under this alternative would be similar. *[Similar]*

Hydrology and Water Quality

Under the Mitigated Design Alternative, erosion impacts during construction activities would be similar to those of the proposed project. These impacts would be reduced to a less-than-significant level through implementation of water quality mitigation similar to that recommended for the project. Further, it is expected that the necessary facilities to accommodate onsite stormwater volumes would be constructed under this alternative. Overall, hydrology and water quality impacts would be the same as under the proposed project. *[Similar]*

Land Use and Planning

Under the Mitigated Design Alternative, CAL FIRE operations and a Estrella Facility parking lot would be relocated onsite. Similar land use and planning impacts to those of the project would occur under this alternative because facilities would be constructed within the CDCR property. No significant land use impacts were identified for the project, so this alternative would not reduce or avoid any significant land use impacts associated with the project and impacts would be similar. *[Similar]*

Noise

Under the Mitigated Design Alternative, the same types of construction activities would occur on the CDCR property. Further, the same number of buildings would be demolished and constructed on the site and these activities would occur over the same construction period. Therefore, construction-related noise impacts would be the same as under the proposed project. Further, under this alternative the same facilities would be operated on-site; therefore, operational noise impacts would be the same as under the project. *[Similar]*

Public Services

The Mitigated Design Alternative would result in public service demands similar to those associated with the project because the same number of staff would be employed and the same number of inmates would be housed onsite under this alternative. No significant public services (i.e., police, fire, schools) impacts were identified for the project, so this alternative would not reduce or avoid any significant public services impacts associated with the project and impacts would be similar. *[Similar]*

Transportation

Under the Mitigated Design Alternative the number of employees commuting to the CDCR property on a daily basis would be the same as under the proposed project. Further, the same construction personnel would be required and would commute to the site because the same number of buildings would be constructed. Therefore, this alternative would result in the same transportation impacts as the project, some of which may be significant and unavoidable. *[Similar]*

Utilities and Service Systems

The Mitigated Design Alternative would result in similar utility demands compared to the project because the same number and size of buildings would be located on-site and the same number of staff and inmates would be located on-site. The Master Reuse Plan would increase demands for utilities and service systems at the site; a new sewer line would be needed, and additional flows to the wastewater treatment plant would occur. Further, the project as proposed either would require an increase in delivery of imported Lake Nacimiento water or would contribute to significant drawdown of the groundwater table. This alternative would result in the same impacts as the project. *[Similar]*

Visual Resources

Under this alternative, existing and proposed CAL FIRE facilities would be set farther back from Airport Road (to the west) and the CAL FIRE recreation area would be moved to the east along Airport Road. Relocation of these buildings would reduce the visual prominence of the CAL FIRE facilities from Airport Road; however, these buildings would continue to be a major feature of the site. This alternative would result in similar nighttime lighting visual impacts because proposed security lighting associated with the project would not be reduced; however, lighting for the CAL FIRE facilities would be set back farther from Airport Road. The relocated visitor parking area would not be visible from Airport Road, and therefore would not result in any adverse visual impacts. Although the visual prominence of the CAL FIRE facilities would be less than under the proposed project, these buildings would continue to be a substantial feature of the site and would block views of the distant hillside areas. Further, the visual impacts from Viewpoints 4 and 5 would not be changed, and the impact would be significant and unavoidable. *[Less, but would not eliminate significant and unavoidable impacts on visual character of Viewpoint 6 and 7; significant and unavoidable impact from Viewpoint 4 and 5 would not be altered and would remain significant and unavoidable]*

Conclusion

The Mitigated Design Alternative would be environmentally superior to the project with respect to visual resources and biological resources. All other resource area impacts would be similar to the project. Further, this alternative would meet all project objectives.

7.4.3 REDUCED DEVELOPMENT: ESTRELLA AND CAL FIRE CONSERVATION CAMP ONLY

With this alternative, the only activities at the CDCR property would be reuse of the DJJ facility and reactivation and expansion of the CAL FIRE Conservation Camp. The DJJ facility would be converted to a Estrella adult inmate facility, surrounded by a lethal electrified fence. It would house up to 1,000 inmates. The CAL FIRE Conservation Camp would house up to 130 Level I inmates (under full conservation camp buildout conditions). The design of both facilities would be the same as for the Master Reuse Plan. The only difference is that the reentry facility would not be developed (see Section 7.4.5, “Off-Site Location for Reentry Facility Alternative,” which considers development of the reentry facility at an off-site alternative; this could be accommodated by the project alternative considered herein).

ENVIRONMENTAL ANALYSIS

Air Quality and Climate Change

Implementation of this alternative would result in the same demolition as, but less construction activities than the project. As under the project, construction-related emissions under this alternative would contribute to regional cumulative impacts. This impact would be significant, even though somewhat less than with reentry because less construction would be needed. Under this alternative, an estimated 3.2 tons per quarter of ozone precursors would be emitted during construction; SLOAPCD's threshold is 2.5 tons per quarter. With the full project, including the reentry facility, the construction estimate would be 4.7 tons per quarter.

During operations, this alternative would produce 22.1 pounds per day of ozone precursors, below the SLOACPD threshold of 25 pounds per day. This would avoid an identified significant impact from the project, which produces 96.8 pounds of ozone precursors per day. A significant impact on operations would be reduced to a less-than-significant level with implementation of this alternative. The Master Reuse Plan's impact could be reduced to a less-than-significant level with project mitigation.

Regarding climate change, the full Master Reuse Plan project could generate cumulatively considerable GHG emissions, estimated at 9,835 tons per year (carbon dioxide equivalent [CO_2e]). If the reentry facility were removed, the project would generate an estimated 6,353 tons per year of CO_2e. This alternative would generate 35% less GHG emissions than the project, but this quantity is still considerable. Further, as explained in the cumulative air quality analysis (Chapter 5), the analysis is more complex; although the GHG emissions associated with the reentry facility would not occur under this alternative, these same inmates and the related employment would be housed at another CDCR facility, so they would still generate GHG emissions at the other location, still contributing to global climate change.

All other impacts would be reduced to less-than-significant levels after implementation of recommended mitigation. Because this alternative would result in less construction-related, operational, and GHG emissions than the project, and would avoid a significant impact from operations, this alternative would have less air quality impacts. *[Less impacts during construction; substantially less impacts during operations for all emissions; GHGs would be substantially less but would still be significant]*

Biological Resources

This alternative would include development of Estrella and CAL FIRE buildings as proposed, and a lethal electrified fence would also be constructed around the Estrella Facility; therefore, this alternative would result in similar impacts on bird species as the project. Removal of four valley oaks would be avoided by not constructing the reentry facility, so impacts on biological resources would be slightly reduced with this alternative. *[Similar but less]*

Cultural Resources

This alternative would likely result in the same potentially significant impacts on previously undiscovered cultural resources as the project. No known cultural resources would be affected, as none are known to occur on the reentry site (or the rest of the CDCR property). *[Similar]*

Employment, Population, and Housing

Under this alternative, the number of employees required for operations would be less than under the proposed project. The full Master Reuse Plan project would result in long-term employment of an estimated 998 people; 366 (roughly 37%) would be employed at the reentry facility. Thus, if the reentry facility were not constructed, employment at the site would be reduced from 998 to 641 people. No significant employment, population, and housing impacts were identified for the project, so this alternative would not alter any conclusions regarding employment, population, and housing impacts. *[Similar]*

Hazards and Hazardous Materials

Under this alternative, CAL FIRE operations and a Estrella Facility would be developed as proposed. Potential hazardous materials exposure associated with prior uses of these sites (underground storage tank [UST], lead-based paint on old structures) would still occur, as would potential exposure to pesticides. These impacts can be mitigated. Construction of the reentry facility would only result in potential exposure to agricultural residuals, another impact that can be mitigated. Therefore, this alternative would result in hazards and hazardous materials impacts similar to those of the project, including the potential to expose construction workers and the environment to hazardous chemicals or materials in onsite soils and/or aged on-site buildings. This alternative would also result in an increase in the number of buildings that exceed height obstruction standards associated with the adjacent airport, because these buildings would be constructed on the Estrella and CAL FIRE sites, both in closer proximity to the airport than the reentry site. With implementation of mitigation similar to the mitigation recommended for the proposed project, these impacts would be reduced to a less-than-significant level. Therefore, hazards and hazardous materials impacts under this alternative would be similar to impacts of the project. *[Similar]*

Hydrology and Water Quality

Under this alternative, the project would result in erosion impacts during construction activities similar to those of the proposed project. These impacts would be reduced to a less-than-significant level through implementation of water quality mitigation similar to that recommended for the project. Further, it is expected that the necessary facilities to accommodate on-site stormwater volumes would be constructed under this alternative, although a different location may be needed (the project includes constructing the basin on the reentry site). Overall, hydrology and water quality impacts would be the same as under the proposed project. *[Similar]*

Land Use and Planning

Land use and planning impacts similar to those of the project would occur under this alternative because facilities would be constructed within the CDCR property. No significant land use impacts were identified for the project, so this alternative would not reduce or avoid any significant land use impacts associated with the project and impacts would be similar. *[Similar]*

Noise

Under this alternative, the same types of construction activities would occur on the CDCR property as under the proposed project. Further, the same number of buildings would be demolished, but fewer buildings would be constructed. Construction noise would be less, but only slightly so, and this impact is mitigable to less-than-significant already. Although less development would occur on the site, the only potentially significant impact would result from occasional operation of a proposed emergency generator, and this impact would still occur (and is mitigable to a less-than-significant level). *[Similar]*

Public Services

The alternative would result in similar, although fewer, public service demands compared to the project. No significant public services (i.e., police, fire, schools) impacts were identified for the project, so this alternative would not reduce or avoid any significant public services impacts associated with the project and impacts would be similar. *[Similar]*

Transportation

Under this alternative, construction traffic would be similar to traffic under the proposed project. The primary difference in traffic would result from operations. Although the majority of the project's daily trips (1,472) would be associated with the Estrella and CAL FIRE facilities (884), the reentry facility would produce slightly more

than half (162) of the total 320 peak hour trips. Significant impacts from the total project were identified for the following intersections:

- U.S. Highway 101 (U.S. 101) Southbound Ramps/State Route (SR) 46 East (p.m. peak),
- U.S. 101 Northbound Ramps/SR 46 East (a.m. and p.m. peak),
- Golden Hill Road/SR 46 East (a.m. and p.m. peak),
- Union Road/SR 46 East (a.m. and p.m. peak),
- Airport Road/SR 46 East (a.m. and p.m. peak),
- Jardine Road/SR 46 East (a.m. and p.m. peak),
- Airport Road/Dry Creek Road (site access impacts) (p.m. peak), and
- Golden Hill Road/Union Road (a.m. peak).

It bears noting that most of these intersections already operate adversely, and the project operations would serve to exacerbate these conditions. If the reentry facility is not constructed, significant impacts associated with the project would be avoided (less than significant) at the following locations:

- U.S. 101 Northbound Ramps/SR 46 East (a.m. peak) and
- Airport Road/Dry Creek Road (site access impacts) (p.m. peak).

Significant impacts would occur at the remaining intersections/peak times, although peak-hour traffic from this alternative would be half of what it would be with the project, and the extent to which it would contribute to these significant impacts would similarly be less.

Mitigation measures would not change without the reentry facility (most are needed for cumulative conditions already) with one exception: with the reentry facility, site access impacts would need to be mitigated by improvements at the Airport Road/Dry Creek intersection (see Section 4.11 of this EIR for details), and this improvement would reduce impacts to a less-than-significant level. Under this alternative (CAL FIRE and Estrella only), traffic impacts at the Airport Road/Dry Creek intersection would be less than significant and no mitigation would be required.

The same significant and unavoidable impacts as the project would result with this alternative, although the extent of impacts would be less, given that half the peak-hour traffic would be generated. Overall, this alternative would result in lesser traffic impacts than the project. *[Less]*

Utilities and Service Systems

This alternative would result in less utility demand than the project because 500 fewer inmates and 366 fewer staff would be at the site. The following impacts and impact differences would occur:

- *Wastewater and sewer line:* Less-than-significant impacts on wastewater treatment capacity would occur under both the proposed project and this alternative. Potentially significant (short-term) impacts would occur to treated wastewater quality if the City's wastewater treatment is not upgraded, as planned, prior to operation of the project; flows from the site would be approximately 30% less with this alternative but the impact would still be a potentially significant contribution to this cumulative impact. Significant impacts would occur related to an 8-inch sewer line that serves the site, and a new line would be needed under both scenarios. *[Similar]*

- *Water:* The proposed project would result in demand for 219 afy of water; 152 afy is needed for the Estrella/CAL FIRE facilities and 67 afy is needed for the reentry facility. This is still a significant impact under this alternative as well as for the proposed project, and the mitigation needed to reduce this impact is importation of additional water from Lake Nacimiento. Entitlements are available for this water. Although removal of the reentry facility would reduce project water demand by roughly 30%, it would not change the

significance of the impact or need for mitigation; because sufficient entitlement for water is available as mitigation, this alternative would not substantially alter the project's impacts. *[Similar]*

- *Solid waste, electricity, natural gas:* The same impacts would occur with or without the reentry facility. No substantial changes would result.

Overall, the primary difference associated with this alternative when compared to the project is the amount of water consumption. This alternative would reduce water consumption by 30% compared to the project. However, for reasons enumerated above, impacts would be similar. *[Similar]*

Visual Resources

Under this alternative, the Estrella and CAL FIRE facilities would be in the same location as the proposed project, which would result in significant impacts on Viewpoints 4, 5, 6, and 7. The reentry facility is marginally visible from any roadways, so not including it would not alter the impact conclusions. *[Similar, would result in significant and unavoidable impacts on visual character of Viewpoints 4, 5, 6, and 7]*

Conclusion

The Reduced Development: Estrella/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality and traffic, and to a lesser extent, biological resources. All other resource area impacts would be similar to impacts of the project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with rehabilitation, preparing inmates to return to the community, and would not go as far as the project in meeting goals to increase systemwide bed capacity.

7.4.4 Reduced Development: Reentry and Cal Fire Conservation Camp Only

With this alternative, the only activities at the site would be construction and operation of the reentry facility and reactivation and expansion of the CAL FIRE Conservation Camp. The DJJ facility would sit vacant. The reentry facility would house up to 500 inmates, the CAL FIRE Camp would house up to 130 Level I inmates, and the restoration component would be implemented. The design of both facilities would be the same as they are under the proposed project. The difference is that the DJJ facility would not be reused as a Estrella Facility, and no lethal electrified fence would be constructed.

Environmental Analysis

Air Quality and Climate Change

Implementation of this alternative would result in little to no demolition, and less construction activities than the project. Similar to the project, construction-related emissions under this alternative would contribute to regional cumulative impacts, although in this case not considerably. This impact would be less than significant. An estimated 2.1 tons per quarter of ozone precursors would be emitted during construction under this alternative (reentry facility and CAL FIRE facility); SLOAPCD's threshold is 2.5 tons per quarter. With the full Master Reuse Plan project, including Estrella, the construction estimate would be 4.7 tons per quarter.

During operations, this alternative would produce 76.4 pounds per day of ozone precursors, above the SLOACPD threshold of 25 pounds per day. Although less than the overall project's 96.8 pounds of ozone precursors per day, this impact would remain significant. This impact could be reduced to a less-than-significant level with project mitigation.

Regarding climate change, the proposed project could generate cumulatively considerable GHG emissions (9,835 tons CO_2e/year). If the Estrella Facility were removed, the project would generate an estimated 4,488 tons per

year of CO_2e. This alternative would generate 54% less GHG emissions than the project, but this quantity is still considerable. Further, as described in Section 7.4.3 and explained in the cumulative air quality analysis (Chapter 5), the analysis is more complex; although the GHG emissions associated with the Estrella Facility would not occur, under this alternative these same inmates and the related employment would be housed at another CDCR facility, so they would still generate GHG emissions at the other location, still contributing to global climate change. However, this reduction is substantial as it relates to the project site.

All other project impacts would all be reduced to less-than-significant levels after implementation of recommended mitigation. Because it is likely that this alternative would result in less construction-related, operational, and GHG emissions than the project, and would avoid a significant impact from operations, this alternative would have lesser air quality impacts. *[Less impacts during construction; Similar but lesser impacts during operations for all emissions except GHGs; GHGs would be substantially less but would still be significant]*

Biological Resources

This alternative would include development of reentry and CAL FIRE buildings as proposed; a lethal electrified fence would not be constructed and trees (including 5 native oaks) would not be removed from the DJJ site, so impacts on birds would be substantially less (although this impact can be mitigated). These impacts can be mitigated. Removal of four valley oaks would occur at the reentry facility. *[Lesser, predominantly because the lethal electrified fence would not be constructed]*

Cultural Resources

This alternative would likely result in the same potentially significant impacts on previously undiscovered cultural resources as the project. No known cultural resources would be affected, as none are known to occur on the Estrella site (or the rest of the CDCR property). *[Similar]*

Employment, Population, and Housing

Under this alternative, the number of employees required for operations would be substantially less than under the project. The project would result in long-term employment of an estimated 998 people; 604 (roughly 61%) would be employed at the Estrella Facility. Thus, if the Estrella Facility were not constructed, employment at the site would be reduced from 998 to 403 people. No significant employment, population, and housing impacts were identified for the project, so this alternative would not alter any conclusions regarding employment, population, and housing impacts. *[Similar]*

Hazards and Hazardous Materials

Under this alternative, CAL FIRE operations and reentry facilities would be developed as proposed. Potential hazardous materials exposure associated with prior uses of the DJJ site (underground storage tanks, lead-based paint on old structures) would not occur, although these materials also would not be remediated. Potential exposure to pesticides from prior agricultural use would result. Therefore, this alternative would result in hazards and hazardous material impacts similar to those of the project, including the potential to expose construction workers and the environment to hazardous chemicals or materials in on-site soils. This alternative would also result in a decrease in the number of buildings that exceed height obstruction standards associated with the adjacent airport, because none of the structures on the Estrella site would be constructed, including guard towers that exceed the height limit. Buildings would be constructed on the CAL FIRE site, in proximity to the airport. The reentry site, located somewhat farther away, would not result in these impacts, although they are mitigable. Hazards and hazardous materials impacts under this alternative would be similar as the project, although remediation of the DJJ site would not occur. *[Similar, but less]*

Hydrology and Water Quality

Under this alternative, the project would result in similar erosion impacts during construction activities. These impacts would be reduced to a less-than-significant level through implementation of similar water quality mitigation recommended for the project. Further, it is expected that the necessary facilities to accommodate on-site stormwater volumes would be constructed under this alternative. Overall, hydrology and water quality impacts would be the same as under the proposed project. *[Similar]*

Land Use and Planning

Land use and planning impacts similar to those of the project would occur under this alternative because facilities would be constructed within the CDCR property. No significant land use impacts were identified for the project, so this alternative would not reduce or avoid any significant land use impacts associated with the project, and impacts would be similar. *[Similar]*

Noise

Under this alternative, they same types of construction activities would occur on the CDCR property as under the proposed project. However, demolition would be minimal (if at all at the CAL FIRE site) and fewer buildings would be constructed. Construction noise would be less, but only slightly so, and this impact is mitigable to a less-than-significant level already. Although less development would occur on the site, the only potentially significant impact would result from occasional operation of a proposed emergency generator, and this impact would still occur (and is mitigable to a less-than-significant level). *[Similar]*

Public Services

The alternative would result in similar, although fewer, public service demands compared to the project. No significant public services (i.e., police, fire, schools) impacts were identified for the project, so this alternative would not reduce or avoid any significant public services impacts associated with the project and impacts would be similar. *[Similar]*

Transportation

Under this alternative, construction traffic would be similar to that under the project. The primary difference in traffic would result from operations, and because the peak-hour traffic from this alternative is nearly identical to the Reduced Development: Estrella and CAL FIRE Only Alternative, impacts would be the same. This is described below. The majority of the project's daily trips (1,472) are associated with the Estrella Facility (830); the reentry and CAL FIRE facilities would produce slightly more than half (172) of the total 320 peak-hour trips. Significant impacts from the Master Reuse Plan were identified for the following intersections:

- U.S. 101 Southbound Ramps/SR 46 East (p.m. peak),
- U.S. 101 Northbound Ramps/SR 46 East (a.m. and p.m. peak),
- Golden Hill Road/SR 46 East (a.m. and p.m. peak),
- Union Road/SR 46 East (a.m. and p.m. peak),
- Airport Road/SR 46 East (a.m. and p.m. peak),
- Jardine Road/SR 46 East (a.m. and p.m. peak),
- Airport Road/Dry Creek Road (site access impacts) (p.m. peak), and
- Golden Hill Road/Union Road (a.m. peak).

As previously stated, most of these intersections already operate adversely, and the project operations would serve to exacerbate these conditions. If the Estrella Facility is not constructed, significant impacts associated with the project would be avoided (less than significant) at the following locations:

- U.S. 101 Northbound Ramps/SR 46 East (a.m. peak) and
- Airport Road/Dry Creek Road (site access impacts) (p.m. peak).

Significant impacts would occur at the remaining intersections/peak times, although peak-hour traffic from this alternative would be half of what it would be with the project, and the extent to which it would contribute to these significant impacts would similarly be less.

Mitigation measures would not change without the Estrella Facility (most are needed for cumulative conditions already) with one exception: with the full Master Plan project (including all facilities), site access impacts would need to be mitigated by improvements at the Airport Road/Dry Creek intersection (see Section 4.12 of this EIR for details), but this improvement would reduce impacts to a less-than-significant level. Under this alternative (reentry and CAL FIRE only), traffic impacts at Airport Road/Dry Creek Road intersection would be less than significant and no mitigation would be required.

The same significant and unavoidable impacts as under the project would result with this alternative, although the extent of impacts would be less, given that half the peak-hour traffic would be generated. Overall, this alternative would results in less traffic impacts than the project. *[Lesser]*

Utilities and Service Systems

This alternative would result in less utility demands than the project because 500 fewer inmates and 366 fewer staff would be at the site. The following impacts and impact differences would occur:

- *Wastewater and sewer line:* Potentially significant (short-term) impacts would occur to treated wastewater quality if the City's wastewater treatment is not upgraded, as planned, prior to operation of the project; flows from the site would be approximately 62% less with this alternative but the impact would still be a potentially significant contribution to this cumulative impact. Significant impacts would occur with regard to an 8-inch sewer line that serves the site. *[Similar]*

- *Water:* The project would result in demand for 219 afy of water; 84 afy is needed for the reentry/CAL FIRE facilities and 135 afy is needed for the Estrella Facility. This is still a significant impact for this alternative and the mitigation needed to reduce this impact is importation of additional water from Lake Nacimiento. Entitlement is available for this water. Although removal of the Estrella Facility would reduce project water demand by roughly 62%, it would not change the significance of the impact or need for mitigation, and because sufficient entitlement for water is available as mitigation, this alternative would not substantially alter the project's impacts. *[Similar]*

- *Solid waste, electricity, natural gas:* Similar levels of impacts would occur with or without the reentry facility. No substantial changes would result.

Overall, the primary difference associated with this alternative when compared to the proposed project is the amount of water consumption. This alternative would reduce wastewater generation and water consumption by 62% compared to the project. However, for reasons enumerated above, impacts would be similar. *[Similar]*

Visual Resources

Under this alternative, the CAL FIRE facilities would be in the same location as the Master Reuse Plan, which would result in significant impacts on Viewpoints 6 and 7. The reentry facility is marginally visible from any roadways, so not including it would not alter the impact conclusions. The DJJ facility would not be converted to a Estrella Facility, so some of the trees on the site would remain and a more dense, lethal electrified fence and concrete wall or other similar protective measure (e.g., bollards, masonry wall) for vehicles along Airport Road would not be constructed. However, there is a strong possibility that, because they would be unused, on-site buildings at the DJJ site would decay over time and become blighted. Because the existing DJJ facility is highly

visible from Airport Road, this impact would be greater than the project. *[Similar and likely greater; would result in significant and unavoidable impacts on visual character of Viewpoints 6 and 7, plus would result in likely decay to DJJ facility]*

Conclusion

The Reduced Development: Reentry/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality, traffic, and biological resources. It would be inferior with respect to hazardous materials (some would not be remediated) and visual resources (because of potential future decay and blight). All other resource area impacts would be similar to those of the project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with reuse of an existing state asset, and would not go as far as the project in meeting goals to increase systemwide bed capacity.

7.4.5 Off-Site Location for Reentry Facility Alternative

This alternative considers constructing the reentry facility at another site. The Estrella/CAL FIRE facility and the proposed restoration area would not be affected by this alternative. This alternative focuses on the reentry component of the project. In addition to these impacts, the impacts described in Section 7.4.3 would also occur.

Under the Off-Site Location Alternative, the reentry facility would be constructed in one of the three counties the reentry facility would serve: San Luis Obispo, San Benito, or Santa Barbara. In consideration of a location, it bears noting that in 2008, the boards of supervisors of all these three counties and the Paso Robles City Council voted to support the reentry facility in Paso Robles. However, before this, earlier in 2008, Santa Barbara County considered siting a reentry facility at its North County Jail facility, in the city of Santa Maria. Thus, this location is considered herein as an alternative location for a 500-bed reentry facility. The reentry facility would have been paired with expansion of the North County Jail. The site would be located on 50 acres, at the southwest corner of Black and Betteravia. A draft EIR was prepared for a prior Santa Barbara County Jail facility at this location (State Clearinghouse No. 2007111009). Information from the findings of that document is used in the discussion below.

7.4.6 Environmental Analysis

Air Quality and Climate Change

This alternative would not include development of the reentry facility at the CDCR property, which would reduce construction impacts substantially. It would also reduce GHG emissions to a level that is less than significant, even if the Estrella/CAL FIRE facilities are repurposed. Construction of the project at the alternative site would result in significant but mitigable impacts on air quality. Although GHG impacts were not listed in the County DEIR's summary of impacts, the GHG impacts would be similar to those of the project. *[Similar]*

Biological Resources

This alternative would not include any new development at the reentry site, and thus would avoid the biological impacts pertaining to removal of four valley oaks.

Significant biological impacts would occur at the alternative site, with potential impacts on species listed under the California Endangered Species Act: California red-legged frog and California tiger salamander. These impacts can be mitigated to a less-than-significant level. *[Similar or greater]*

Cultural Resources

Like the reentry site, the alternative site could have unknown buried cultural resources. This impact is mitigated to a less-than-significant level. *[Similar]*

Employment, Population, and Housing

Under the Offsite Location Alternative, the number of employees at the CDCR property would be substantially reduced. This is not a significant impact.

This alternative would result in new employment opportunities, population increases, and increased demand for housing at and in the vicinity of the Santa Barbara County site. These employment opportunities would likely be a beneficial impact. No associated adverse impacts were identified in the County's EIR. *[Similar]*

Hazards and Hazardous Materials

This alternative would not include any new development at the reentry site, and thus would avoid the project's potential for hazardous materials exposure during construction. However, project impacts would be reduced to less-than-significant levels after implementation of recommended mitigation. Under this alternative, potential hazards could result at the Santa Maria site from an abandoned oil well, historic application of pesticides, and exposure to pesticides from adjacent agriculture. These impacts can be mitigated. *[Similar but greater]*

Hydrology and Water Quality

This alternative would have mitigable impacts related to erosion and soils that would be similar to those of the project. *[Similar]*

Land Use and Planning

The 500-bed reentry facility would be constructed at an offsite location. There are no land use impacts associated with development of this facility on the CDCR property.

Development at the offsite location would result in the conversion of 50 acres of agricultural land and restrictions on adjacent agricultural land uses. This impact is significant and unavoidable according to the County's EIR. *[Greater]*

Noise

The Master Reuse Plan's generators could exceed stationary-noise-source criteria without additional shielding. However, mitigation recommended in the DEIR would reduce the project's impact to a less-than-significant level. Impacts on roadway noise would be less than significant and construction impacts are potentially significant but mitigable to a less-than significant level.

Impacts associated with the offsite alternative would be similar, but slightly less because of the absence of sensitive receptors, per the County's EIR. *[Similar but slightly less]*

Public Services

The Offsite Location Alternative would result in public service demands similar to those of the project, because this alternative would result in a similar demand for police, fire, and emergency services. These impacts were determined to be less than significant for the project and for this alternative site. *[Similar]*

Transportation

The project has significant and significant and unavoidable impacts at several locations. Moving the reentry facility would reduce the significant impact at Airport/Dry Creek Road, but other significant unavoidable impacts would remain.

This alternative would generate a similar number of daily traffic trips, split between the project site and the Santa Barbara County site, but according to the County's EIR would not result in any significant impacts on intersections or roadway segments in Santa Barbara County. *[Lesser]*

Utilities and Service Systems

The reentry facility would contribute to significant impacts on water and wastewater. Both impacts are mitigable, unless upgrades to the treatment plant are delayed (potential short-term impact) and unless CDCR is required to rely on groundwater, which is a potentially significant and unavoidable impact.

The Offsite Location Alternative would result in utility demands similar to those of the project. According to the County EIR, significant unavoidable impacts related to solid waste disposal would result. Significant and mitigable (to a less-than-significant level) impacts related to wastewater generation and fire hazards would occur under this alternative. *[Similar or greater]*

Visual Resources

Under this alternative, the reentry site would not be developed in Paso Robles. Development of the reentry site adds to the overall significant visual change associated with the project, although the reentry site's contribution is relatively minor because the site is not substantially visible. However, visual impacts related to the Estrella and CAL FIRE components would still remain.

The alternative site is located in an undeveloped area surrounded by agriculture. Conversion to a correctional facility would be a significant and unavoidable impact to the visual character of the area, according to the County's EIR. *[Similar or Greater]*

Conclusion

The Offsite Location Alternative would result in most impacts that are similar to the proposed project. However, it would result in greater impacts on solid waste facilities, agriculture, and aesthetics. Only transportation impacts and, potentially, water (if Lake Nacimiento supplies cannot be procured) would be reduced with this alternative, although most of the significant traffic impacts would still occur and there would remain a need for Nacimient water (assuming the Estrella/CAL FIRE facilities are built at the site).This alternative would attain most objectives of the proposed project.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project (No Development) Alternative would be environmentally superior to the Master Reuse Plan project with respect to the following issues: air quality and climate change, biological resources, cultural resources, hydrology and water quality, noise, public services, transportation, utilities and service systems, and visual resources. It would eliminate significant and unavoidable cumulative air quality impacts and project and cumulative impacts on some highway ramps, intersections, and roadway segments in the vicinity. It would eliminate potential short-term impacts to treated wastewater quality if the City's wastewater treatment plant upgrades are not completed prior to project operation, and would eliminate potential significant groundwater impacts if an entitlement to Nacimiento Lake water cannot be procured. It would be similar to the project with respect to employment, population and housing; hazards and hazardous materials; and land use and planning. Overall, this alternative is environmentally superior to the Master Reuse Plan. However, this alternative would not attain any of the objectives of the project.

The Mitigated Design Alternative would be environmentally superior to the project with respect to biological resources and visual resources. All other resource area impacts would be similar to impacts of the project. Further, this alternative would meet all project objectives. However, because if would require demolition of existing, usable CAL FIRE facilities, this alternative would be substantially more costly than the project.

The Reduced Development: Estrella/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality and climate change, traffic, and to a lesser extent, biological resources. All other resource area impacts would be similar to impacts of the project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with rehabilitation, preparing inmates to return to the community, and would not go as far as the project in meeting goals to increase system-wide bed capacity.

The Reduced Development: Reentry/CAL FIRE Only Alternative would be environmentally superior to the project with respect to air quality and climate change, biological resources, and traffic. It would be inferior with respect to hazardous materials (some would not be remediated) and visual resources (because of potential future decay and blight). All other resource area impacts would be similar to impacts of the project. This alternative would attain some of the project objectives, but would not attain several important objectives associated with reuse of an existing state asset, and would not go as far as the project in meeting goals to increase systemwide bed capacity.

The Off-Site Location Alternative would be environmentally inferior to the project with respect to land use and planning (agricultural resources), public services (solid waste facilities), and visual resources. It would be superior to the project with respect to transportation and, potentially, wastewater (if upgrades to the City's treatment plant are not completed) and water (if Lake Nacimiento supplies cannot be procured). All other impacts would be similar. Overall, the project is environmentally superior to this alternative, although only slightly.

The No Project (No Development) Alternative is the overall environmentally superior alternative. In the absence of the No Project Alternative, the Mitigated Design Alternative and both Reduced Development Alternatives would be environmentally superior.

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APPENDIX A

Notice of Preparation

NOTICE OF PREPARATION

GENERAL INFORMATION

Project Title: CDCR -- Paso Robles Property Master Reuse Plan

Lead Agency: California Department of Corrections and Rehabilitation
Division of Planning, Acquisition, and Design
Environmental Services Branch
9838 Old Placerville Road, Suite B
Sacramento, CA 95827
Contact: Jane Hershberger, Environmental Planning Section
Phone: (916) 255-2236

Project Location: The project site consists of an approximately 160-acre parcel situated at 4545 Airport Road, Paso Robles, California. The entire parcel is owned by the State of California, California Department of Corrections and Rehabilitation (CDCR). The parcel contains the former Division of Juvenile Justice (DJJ) El Paso de Robles Youth Correctional Facility, which was closed in July 2008, the California Department of Forestry and Fire Protection (CAL FIRE) Los Robles Conservation Camp, and vacant land. The parcel is within the city of Paso Robles in northern San Luis Obispo County (Exhibit 1). See Exhibit 2 for the boundaries of the state-owned property, existing facilities, and location of proposed facilities within the subject parcel.

Purpose of Notice: The provisions of the California Environmental Quality Act (CEQA) require the distribution of a notice of preparation (NOP) when a lead agency has determined that a proposed project will require the preparation and adoption of an environmental impact report (EIR). The objective of the NOP is to solicit comments on the scope of the issues to be addressed in the EIR and to provide an opportunity for early consultation with local, responsible, and trustee public agencies. See Sections 15082 and 15083 in the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

The EIR will address potentially significant adverse environmental effects of the project, as well as identify mitigation measures that, when feasible, could wholly or partially reduce the magnitude of the project's significant adverse environmental effects. In accordance with Section 15082 of the State CEQA Guidelines, CDCR has prepared this NOP to provide responsible and trustee agencies and other interested parties with information describing the project and the issue areas that the lead agency plans to evaluate in the EIR.

Scoping Meetings: On Wednesday, October 21, 2009, CDCR will conduct two public scoping workshops/meetings from 1:30 p.m. to 4:00 p.m. and 5:30 p.m. to 8:00 p.m., for the purpose of presenting information on the proposed master plan for the parcel and to solicit comments from public agencies and community members on the scope of the EIR in regard to the proposed project. The workshops/meetings will be held in the Council Chambers, City Hall, 1000 Spring Street, Paso Robles, CA 93446. If appropriate, the lead agency will consider scheduling additional scoping meetings.

PROPOSED PROJECT

The proposed master plan for the 160-acre, state-owned parcel has three principal components. The EIR will address the master plan and provide project-level analysis for the three CDCR/CAL FIRE components. The components of the master plan are as follows:

1. **Estrella Level II Adult Male Correctional Facility.** The first component of the project that will be addressed in the EIR is the proposed conversion of the now-closed DJJ El Paso de Robles Youth Correctional Facility to an adult, medium-security correctional facility (Exhibit 3). The EIR will address this proposal at a project-level of analysis. The proposed name of the new adult facility is the Estrella Correctional Facility. Estrella is the name of a family that has lived in the Paso Robles area for many generations. Prior to its conversion to a juvenile facility following the end of World War II the compound was known as the Estrella Army Bomber Base.

The existing housing units that served the DJJ operation (a combination of dormitories and two celled housing units) provide appropriate living quarters for inmates classified as Level II; based on existing CDCR security and housing protocols these housing units could not be used for CDCR inmates of a higher security level. While a substantial portion of the existing facility can be reused to house Level II inmates with only minimal modifications, the conversion to an adult correctional facility would require installing a new perimeter security system, adding new support/administrative facilities, staff and visitor parking, and other physical changes to meet the security and operational needs of the new adult correctional facility.

The operational capacity of this facility has been set at approximately 1,000 total inmates. Within this limit, CDCR plans to house approximately 900 Level II inmates at this facility after all modifications are completed. Within the four-tier CDCR inmate classification system, Level II is considered the lower range for medium security inmates; however, while Level II inmates can be given work assignments for necessary support services within a correctional facility, they cannot be released for work activities outside of the secure perimeter. To address this need, the facility would also have available housing for approximately 100 Level I minimum security inmates that could provide a wide range of support and maintenance services for the Estrella facility. These inmates would be accounted for within the 1,000 total inmates housed at the facility.

In response to community concerns, CDCR is committed to making a portion of these minimum security inmates available to serve, as needed, on inmate work crews for such activities as landscape maintenance, regional conservation projects, and emergencies (including wild fires and other natural disasters) similar to those provided by wards from the former DJJ facility. CAL FIRE and CDCR would be responsible for supervision and transport of any Level I inmate work crews working outside the grounds of the facility.

A total population of about 1,000 inmates (Level I and II as described above) is anticipated to be the maximum housing capacity of this facility based on the spatial characteristics of the existing housing units. No changes or additions to the existing housing capacity of the former DJJ facility are planned as part of this project. CDCR intends to use the Estrella facility to house older adult Level II inmates, many of whom may have many years remaining on their sentences. Older inmates would benefit from the existing one-story, open dormitories because of the absence of significant barriers to access and path of travel. Further, an existing clinical building would be valuable in providing typical outpatient services that would be necessary for this aging inmate population.

Medical outpatient services would be the responsibility of the court-ordered Medical Receiver, who coordinates with the CDCR prison system to ensure appropriate inmate medical care.

Inmates selected to be housed at the proposed Estrella facility would be screened to avoid individuals who have advanced or acute medical needs. The Medical Receiver is planning consolidated medical care facilities in other locations for inmates with these higher medical needs.

The details of any new or modified facilities and clinical offices needed to augment the medical care of the Estrella inmates will be developed during the EIR process. As noted elsewhere in this notice, the EIR will address potential changes in the need for emergency services and the use of local hospitals in situations where prison emergency cases are referred to outside facilities.

Regardless of the individual circumstances of an inmate's commitment to this facility, all inmates will meet CDCR's classification criteria for the Level II rating or be classified as meeting minimum security standards (Level I) and the maximum number of inmates housed would be 1,000.

Estrella Enhanced Security Measures. Because the project involves conversion of the former juvenile facility to a facility that would house adult male Level II inmates, CDCR would install a new perimeter security system. This system would meet all of CDCR's security and public safety policies and standards. The new perimeter would consist of two, 12-foot-high cyclone fences topped with razor wire. The new security fencing would be installed around the entire perimeter of the former juvenile facility. CDCR would also

install a lethal electrified fence between the outer and inner perimeter fences. The new perimeter security system would require two 30- to 40-foot-tall observation towers. One would be situated at the pedestrian sallyport near the existing Administration Building; a similar observation tower would be installed on the west side of the perimeter to control vehicular and visitor access to the new correctional facility. No other observation towers would be needed or have been planned for the Estrella facility.

2. **Central Coast Regional Secure Community Reentry Facility.** CDCR proposes to construct a secure community reentry facility on vacant state-owned land immediately west/northwest of the perimeter of the former juvenile facility. See Exhibit 2 for the proposed location of the reentry facility. The counties of San Luis Obispo, San Benito, and Santa Barbara have committed to cooperating on the operation of the planned Central Coast Regional Secure Community Reentry Facility ("Secure Community Reentry Facility" or SCRF), which would serve the anticipated number of inmates annually paroled to these three respective counties. The secure community reentry facility would operate independently from the adult correctional facility. While complimentary, the proposed reentry facility is not functionally related to the planned conversion of the existing facility to an adult correctional facility. If approved, construction of this facility would be implemented on a separate schedule than the Estrella project.

   The proposed SCRF would be designed to house a maximum of 500 inmates. The objective of this program is to provide a secure facility that can house qualified adult male inmates during their last 12 months of their respective sentences prior to parole. The facility would provide space for special programs whose goal is to better prepare inmates for return to the community of their last legal residence.

   The proposed SCRF would be operated by CDCR with the cooperation of the participating counties. The facility would *not* function as a halfway house with a work release program; it would be a secure correctional facility where inmates would be housed 24-hours a day for the final 12 months of their respective sentences. The facility would be designed to meet all the CDCR standards including public safety. Operation of a secure community reentry facility at the Paso Robles site would not change the state's obligation to return paroled inmates to the county of their last legal residence.

   At the request of the City of Paso Robles (City), all parties to the proposed SCRF have signed a memorandum of understanding (MOU) for the Central Coast SCRF. A copy of the MOU is attached to this notice. The MOU addresses a range of operational concerns expressed by the City including coordination of transport of inmates upon release from the SCRF to assure they depart to their last legal residence, the modes of transportation, the responsibility for providing community services for parolees, and the City's expectations for the environmental review process for the master plan and individual projects on the state-owned property.

3. **CAL FIRE Conservation Camp.** The EIR will address two aspects of the CAL FIRE conservation camp. The first will be the interim reactivation of the CAL FIRE conservation camp using Level I inmates housed at the proposed Estrella facility; the second is the planned construction of a full stand-alone conservation camp with an inmate dormitory and related support buildings not currently available at the existing CAL FIRE Facility. The proposed master plan for the former DJJ property will include the designation and commitment by CDCR of an area within the state-owned land for a permanent site that will be large enough for a complete CAL FIRE conservation camp. The area designated for the camp would be capable of supporting all the facilities needed for an approximately 130-bed inmate facility. CDCR will address the proposed construction of a full conservation camp in the EIR based on planning materials provided by CAL FIRE. The area planned as a future conservation camp is associated with the area already devoted to CAL FIRE support buildings in the northeastern corner of the parcel. See Exhibit 2 for the area to be designated for CAL FIRE operations.

   Interim Conservation Camp. Conversion to an adult correctional facility will provide an opportunity for CAL FIRE to have two interim Level I inmate crews that could serve the Paso Robles area on a variety of public service and conservation activities. An inmate crew is typically made up of 17 to 20 members. While the conservation camp operation was demobilized with the closure of the DJJ facility, CAL FIRE believes it

can provide sufficient staffing to support these crews until the new camp is available. The inmates for these crews, as well as inmates potentially needed during local emergencies, would be part of the approximately 100 Level I minimum security inmates housed at the proposed Estrella Correctional Facility. No new facilities would be needed by CAL FIRE to use Level I inmates on an interim basis for local conservation projects until a complete conservation camp complex is available. The new conservation camp complex will include a separate dormitory, mess hall, warehouse, and other fire equipment/support buildings. These buildings would provide CAL FIRE with the opportunity to eventually have a full conservation camp available to serve the Central Coast Region.

Permanent CAL FIRE Los Robles Conservation Camp. The CAL FIRE conservation camp would have the capacity to house approximately 130 Level I inmates. CAL FIRE conservation camps are operated jointly by CDCR and CAL FIRE. CDCR provides correctional officers to oversee security of the inmates while CAL FIRE supervises inmate work crews.

4. **On-Site Habitat Restoration Area.** CDCR will also consider use of the southwestern corner of the 160-acre parcel for permanent habitat restoration. This is the triangular area just west of the employee housing. This area may be used for planting of valley oaks and other representative habitat affected by the project such as the potential loss of some mature oak trees within the Estrella site.

Potential Permits and Approvals Required: The following is a list of permit actions and consultations with local and trustee agencies that the lead agency anticipates will be required to implement the project elements. As a result of the NOP scoping process other permit actions may be identified.

- California Department of Corrections and Rehabilitation is the lead agency for the consideration and approval of a master reuse plan for the 160-acre state-owned parcel including the potential conversion of the former youth authority facility to an adult male Level II correctional facility, the construction and operation of a 500-bed secure community reentry facility, and designation of an area within the parcel for a permanent CAL FIRE conservation camp that would be the responsibility of CAL FIRE.

- San Luis Obispo County Air Pollution Control District: Authority to construct and permit to operate any on-site generators and/or boilers.

- Regional Water Quality Control Board: General construction permit that will require project-level storm water prevention permits for each construction site within the parcel.

- California Department of Fish and Game: Consultation on removal of some existing vegetation within parcel, mitigation for the proposed lethal electrified perimeter fence, and potential encroachment to the reported San Joaquin kit fox migration corridor west of the parcel.

- U.S. Fish and Wildlife Service: Consultation on mitigation for the proposed lethal electrified perimeter fence.

- California Department of Forestry and Fire Protection: Construction and operation of an expanded CAL FIRE Los Robles Conservation Camp.

- City of Paso Robles: Potential modification of utility agreements (e.g., sewer, water) and encroachment permit(s); consultation regarding potential off-site roadway improvements and potential encroachment permits; consultation on security lighting with airport operator; and consultation regarding potential landscape improvements along property frontage on Airport Road.

- California Department of Transportation, District 5: Consultation regarding potential off-site roadway improvements (State Route [SR] 46).

PROJECT PURPOSE AND NEED

CDCR facilities are experiencing a bed shortage that has created severe inmate crowding conditions statewide. The housing of the inmate population has exceeded the rated capacity of institutions and has affected the physical plant and operations to the extent CDCR facilities are unable to operate efficiently. Because CDCR has insufficient celled and dormitory housing to accommodate the current and projected adult male population, CDCR has activated "non-traditional" temporary housing utilizing existing program areas (i.e., gymnasiums and day rooms) to provide housing for the expanding population.

In response to the projected deficiency in the number of adult male inmate beds in the statewide prison system, the California Legislature passed Assembly Bill 900, the Public Safety and Offender Rehabilitation Services Act of 2007 (the Act). The Act authorizes CDCR to design, construct, or renovate prison housing units, prison support buildings and programming space to add up to 16,000 beds in several phases at CDCR facilities. The Act also authorized the construction of secure community reentry facilities and treatment space for inmates in need of mental health and substance abuse treatment services.

The Act provides for CDCR to establish county and/or regional-based reentry facilities throughout the state that will house a total of up to 10,000 inmates. This legislation recognized the need to more effectively supervise offenders and provide expanded rehabilitative serves to inmates prior to their release. The Act requires CDCR to expand educational, vocational, and substance abuse treatment programs for incarcerated individuals prior to their parole. The Act also requires CDCR to conduct assessments of all individuals entering state prisons, which shall be used to match individuals to appropriate reentry programs. Finally, CDCR must develop a collaborative partnership with local governments, local law enforcement, and social service providers in the communities where reentry program facilities are built and operated because parolees are eventually returned to the county of their last legal residence.

The former Paso Robles Juvenile Facility was closed in July 2008 in response to a substantial statewide decline in the number of youthful offenders (wards) sentenced to state facilities. The state population is now at approximately 1,700 wards, which is a result of legislative actions that discouraged the use of state facilities when local juvenile programs could be more effective.

CDCR believes the former DJJ site represents a potentially unique opportunity to reuse existing correctional facilities on State owned land to help reduce overcrowding in the State prison system.

PROJECT SITE

The Paso Robles property is located in the north central portion of San Luis Obispo County. The recently closed juvenile facility is situated on a 160-acre state-owned site that is approximately 3 miles northeast of central Paso Robles and approximately 30 miles north of the City of San Luis Obispo (see Exhibit 1). Airport Road provides direct access to the parcel from SR 46, which provides regional access to U.S. Highway 101 (U.S. 101) about 2 miles west of the facility. The project site is surrounded by land that has been historically utilized for agriculture and the regional airport. Recently, development has been initiated on the Airport Road Business Park directly south of the facility across Dry Creek Road. The Paso Robles Municipal Airport is located directly east/northeast of the project site across Airport Road (Exhibit 2). The airport area is generally recognized as an increasingly popular location for business park developments.

DESCRIPTION OF PROPOSED FACILITIES

The Paso Robles juvenile facility opened in 1947 as the Paso Robles School for Boys. Additional buildings were added in 1954 to make the school a fully-functioning juvenile detention facility. In 1988, the Los Robles Forestry Camp was developed as a maintenance and security control center for the California Department of Forestry and Fire Protection. This housing unit is situated inside the secure perimeter of the former juvenile facility. A living

center was completed in 1990 and in 2001 an outpatient housing unit was developed to replace the 1954 infirmary. Additional upgrades, including six new classrooms and a new air conditioning system were constructed in 2004. As noted above, the facility closed and was de-activated in July 2008.

The Administrative Building and chain link fences make up the outer perimeter of the former juvenile facility. The interior security area is enclosed with a 12-foot-high chain-link fence; the outer fence is slightly higher. The vehicular access into the facility would be from an electronically operated sally port gate (a set of two gates that prevent an opening in the perimeter). Buildings associated with the CAL FIRE operation are located just north (outside) of the perimeter fence.

Conversion to Adult Male Correctional Facility

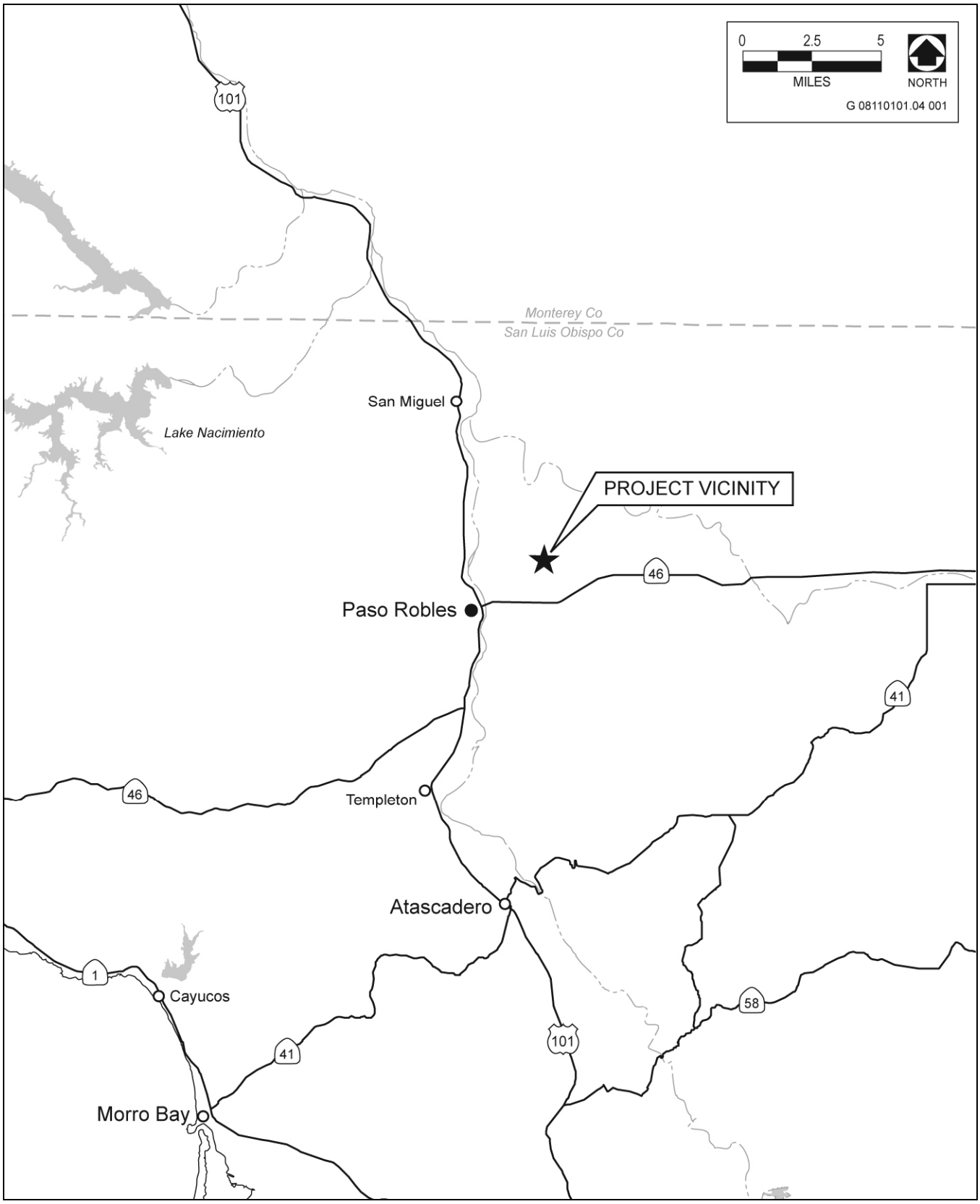
The proposed conversion to an adult male correctional facility would include modifications, as noted above, to the secure perimeter by additional fencing, demolition of two existing buildings that are situated in the path of the new fencing, construction of outer patrol roads, one bermed observation post, two observation towers (approximately 30 to 40 feet high), a new pedestrian sallyport, and modifications to the existing vehicular sally port. New building construction would include a receiving and release building, entrance building, family visiting, central control, visitor processing building, additional clinical offices, and other support buildings. Existing building upgrades would include: reroofing, security hardware replacement, window repairs and replacement, plumbing, heating/cooling equipment, and electrical repairs and upgrades. Infrastructure improvements would include repair/replacement of the existing asphalt roads and sidewalks within the site to assure path of travel access compliance standards are met. The project would include improvements to the existing lighting structures, but would not include the installation of high mast lights common at high security prisons. The new perimeter fencing would include a lethal electrified element consistent with CDCR security standards. The fence would be designed to minimize loss of wildlife through the use of standard CDCR designs and operations.

Additional parking for staff and visitors would be provided to the west of the facility just north of the existing warehouse. This is necessary because some existing parking areas would be reduced by placement of the new perimeter fence and potential landscaping along Airport Road. Relocation of some parking is also anticipated to be necessary because the main visitor entrance would be from the upgraded vehicular/pedestrian sallyport on the west side of the perimeter. The service entrance to the facility would remain on the west side near the existing warehouse and support buildings. Access to the Estrella Correctional Facility would continue to be provided from Airport Road to the east side of the complex (existing employee/visitor parking lot); access to the vehicular sallyport, support buildings, and new employee/visitor parking would be from the old alignment of Dry Creek Road, which borders the southern edge of the facility. Both of these access points have been used by the facility for many years. During the EIR process, CDCR will also review other potential access sites for the project.

Potable water is provided by two primary on-site wells (one additional well is abandoned and another is backup), a chlorination system, and storage tanks. The existing facility provides water to the city’s sewage lift station to the west of the property.

Secure Community Reentry Facility Component

The project includes plans for a separate, stand-alone, secure community reentry facility to the west/northwest of the existing former juvenile facility. The reentry facility would be entirely contained within secured buildings (e.g., the security system would be the outer wall of the building, similar to a typical urban jail). No additional perimeter security fencing is anticipated around this facility, although a typical boundary fence would be provided. The building would be about 220,000 gross square feet and would require a total development area (e.g., parking, access, landscaping) of about 12–15 acres. The facility would be designed for a maximum of 500 inmates. The counties of San Luis Obispo, San Benito, and Santa Barbara have agreed to participate in the development of the reentry program for this portion of the state. Rehabilitative programs, education, and training would be provided within the reentry building.

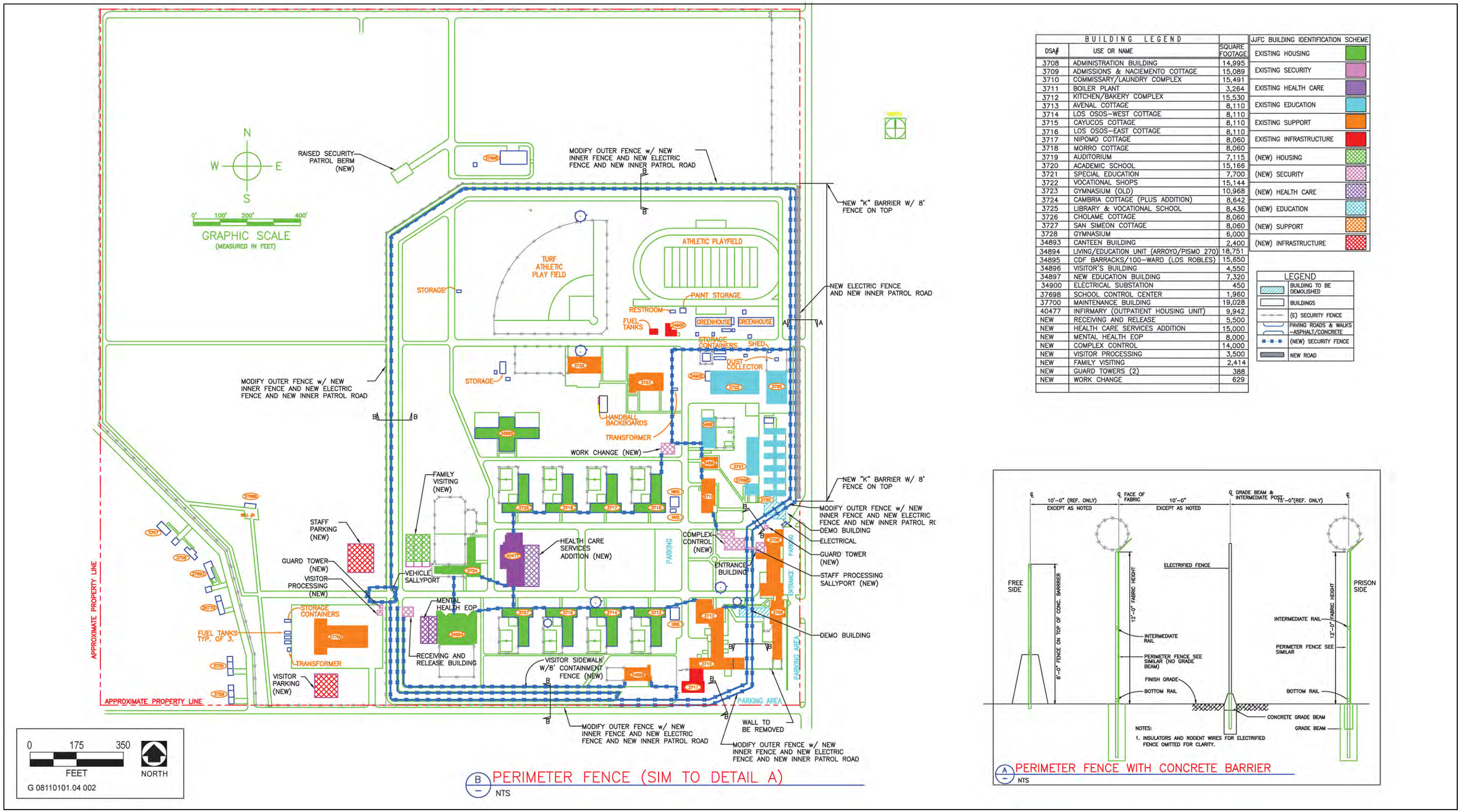


Source: Created by EDAW in 2008

Regional Location **Exhibit 1**

Source: Vanir 2009, CDCR 2009, adapted by EDAW in 2009

Site Vicinity **Exhibit 2**



BUILDING LEGEND		
DSA#	USE OR NAME	SQUARE FOOTAGE
3708	ADMINISTRATION BUILDING	14,995
3709	ADMISSIONS & NACIEMENTO COTTAGE	15,089
3710	COMMISSARY/LAUNDRY COMPLEX	15,491
3711	BOILER PLANT	3,264
3712	KITCHEN/BAKERY COMPLEX	15,530
3713	AVENAL COTTAGE	8,110
3714	LOS OSOS–WEST COTTAGE	8,110
3715	CAYUCOS COTTAGE	8,110
3716	LOS OSOS–EAST COTTAGE	8,110
3717	NIPOMO COTTAGE	8,060
3718	MORRO COTTAGE	8,060
3719	AUDITORIUM	7,115
3720	ACADEMIC SCHOOL	15,166
3721	SPECIAL EDUCATION	7,700
3722	VOCATIONAL SHOPS	15,144
3723	GYMNASIUM (OLD)	10,968
3724	CAMBRIA COTTAGE (PLUS ADDITION)	8,642
3725	LIBRARY & VOCATIONAL SCHOOL	8,436
3726	CHOLAME COTTAGE	8,060
3727	SAN SIMEON COTTAGE	8,060
3728	GYMNASIUM	6,000
34893	CANTEEN BUILDING	2,400
34894	LIVING/EDUCATION UNIT (ARROYO/PISMO 270)	18,751
34895	CDF BARRACKS/100–WARD (LOS ROBLES)	15,650
34896	VISITOR'S BUILDING	4,550
34897	NEW EDUCATION BUILDING	7,320
34900	ELECTRICAL SUBSTATION	450
37698	SCHOOL CONTROL CENTER	1,960
37700	MAINTENANCE BUILDING	19,028
40477	INFIRMARY (OUTPATIENT HOUSING UNIT)	9,942
NEW	RECEIVING AND RELEASE	5,500
NEW	HEALTH CARE SERVICES ADDITION	15,000
NEW	MENTAL HEALTH EOP	8,000
NEW	COMPLEX CONTROL	14,000
NEW	VISITOR PROCESSING	3,500
NEW	FAMILY VISITING	2,414
NEW	GUARD TOWERS (2)	388
NEW	WORK CHANGE	629

JJFC BUILDING IDENTIFICATION SCHEME	
EXISTING HOUSING	
EXISTING SECURITY	
EXISTING HEALTH CARE	
EXISTING EDUCATION	
EXISTING SUPPORT	
EXISTING INFRASTRUCTURE	
(NEW) HOUSING	
(NEW) SECURITY	
(NEW) HEALTH CARE	
(NEW) EDUCATION	
(NEW) SUPPORT	
(NEW) INFRASTRUCTURE	

LEGEND
BUILDING TO BE DEMOLISHED
BUILDINGS
(E) SECURITY FENCE
PAVING ROADS & WALKS –ASPHALT/CONCRETE
(NEW) SECURITY FENCE
NEW ROAD

Source: Vanir 2009, CDCR 2009, adapted by EDAW in 2009

Site Plan **Exhibit 3**

The facility is expected to be primarily one-story in height with a mezzanine level at the housing units and two stories at the front administrative area based on the reentry architectural program. The facility would not be directly observable from local roadways because of the intervening views of the former juvenile facility, the buildings associated with the CAL FIRE complex, and its placement in the northwestern corner of the parcel.

CAL FIRE Los Robles Conservation Camp

New buildings would not be required for the proposed interim conservation camp operation; the existing CAL FIRE buildings are sufficient to support two institution-based conservation crews. The proposal to build a full conservation camp would result in the need for additional buildings including a 130-bed inmate dormitory (approximately 16,000 square feet), administration (approx. 6,000 square feet), kitchen/mess hall (approx. 8,400 square feet), dozer transport (approx. 2,000 square feet), a warehouse (approx. 6,000 square feet), apparatus building (approximately 6,000 square feet) and various support buildings including but not limited to laundry, family visiting, recreation, carpentry and saw repair, generators, worship, staff barracks, and a covered wash rack with water recycling system.

Staffing Levels

The Estrella Correctional Facility would require approximately 500-520 staff distributed over three, 8-hour watches. The former juvenile facility employed approximately 350 staff prior to its closure in July 2008. The proposed Central Coast SCRF is projected to require approximately 350 staff; the majority would be on the second watch (7 a.m.–5 p.m.). The interim conservation camp would generally utilize existing staff assigned to the CAL FIRE Los Robles Conservation Camp; staffing for a full conservation camp would require approximately 32 staff. Full operation of all three components would require approximately 880–900 staff.

Environmental Baseline

The baseline environmental conditions for the EIR assume the existing physical site conditions of the former juvenile and CAL FIRE facilities and their current respective staffing levels.

POTENTIAL ENVIRONMENTAL EFFECTS

The EIR will identify and describe the potential environmental effects associated with implementing the conversion of the existing facility to a 1,000-bed medium/minimum security level male adult correctional facility, an approximate 130-bed future CAL FIRE conservation camp, and construction of a 500-bed SCRF. Mitigation measures will be identified that may reduce or eliminate potentially significant and significant effects of the combined projects.

The following issues are proposed for analysis in the EIR:

Visual Resources, Light, and Glare

There are a number of scenic resources within the project area. The project would include lighting improvements; some modification/removal of ornamental landscaping and trees; construction of the reentry facility, two observation towers, perimeter security roads, and an observation berm. The EIR will provide an assessment of potential project lighting, glare, and aesthetic effects due to changes in appearance of the site and the addition of new structures.

The EIR will also assess visual impacts of the new security fencing including opportunities to improve the appearance of the existing frontage along Airport Road; especially the section that is close to the road, the frontage at the intersection of Airport Road, and the old alignment of Dry Creek road. Visual simulations of the new secure perimeter and other viewpoints of the property will be provided in the EIR. The EIR will address the

changes to the existing setting based on viewpoints from adjacent properties (e.g., the planned business/winery park, rural residences) and travelers on Airport Road.

Agriculture Resources

There are no agricultural activities within the site and the project is not expected to affect agricultural resources. However, the EIR will assess the projects' potential to impact any soils considered capable of supporting agriculture, as defined in the Paso Robles General Plan.

Air Quality and Greenhouse Gas Emissions

The EIR will describe regional and local air quality in the vicinity of the project site and evaluate construction and operational effects on air quality. The project's estimated air emissions will be compared to emissions thresholds of the San Luis Obispo Air Pollution Control District. The EIR will also include a discussion on greenhouse gas emissions and potential global climate change effects. The EIR will address all sources of short and long-term combustion emissions including new emergency generators and boilers as well as particulates generated during construction of the new facilities.

Biological Resources

The project would consist of construction on previously disturbed areas of the existing juvenile complex and on vacant land directly adjacent to its perimeter. Potentially sensitive resources (e.g., native trees, any drainage area/s) that may be affected by the project will be identified, mapped and considered in the environmental analysis. The lead agency anticipates the removal of some mature native and nonnative trees to accommodate new security requirements. The EIR will address biological concerns for the proposed installation and operation of a lethal electrified fence, which would be a security enhancement to the perimeter of the former juvenile facility. Recommended mitigation to off-set significant effects to biological resources will be provided in the EIR. As noted, the master plan will also potentially designate an on-site habitat conservation area in the southwest corner of the parcel. If feasible, this area would be used for habitat mitigation.

The EIR will also assess the project's potential to reduce or degrade the quality of the reported kit fox migration corridor in this area. Potential mitigation measures that will enhance the corridor, including modification of the existing boundary fencing on the west side of the parcel, will be evaluated.

Cultural, Historic, and Paleontological Resources

The proposed project would be constructed primarily on previously disturbed areas of the existing juvenile facility and vacant land within the state ownership. The site was graded and disturbed during construction of the current and historic facilities (including World War II). While it is not anticipated that the project would result in any adverse effect to cultural, historical, or paleontological resources, development of the SCRF has the potential to unearth previously unidentified resources. Further, the EIR will determine if any historically significant structures would be affected within the juvenile facility through renovation or demolition.

Geology, Soils, Seismicity, and Mineral Resources

The site is located in a seismically active area. The EIR will evaluate the project's potential exposure to geologic hazards (e.g., earthquakes, liquefaction), and will consider information from previous environmental studies, as appropriate. It is anticipated that all buildings and infrastructure will be designed and constructed to meet the seismic requirements of Title 24, the California Building Code.

Regarding mineral resources, the project site is not located in an area that contains known mineral resources. This issue will not be analyzed further in the EIR but instead will be identified as an environmental effect found to be less than significant.

Hazards, Hazardous Materials, and Public Health

The proposed project involves the construction of facilities on a previously disturbed area of the existing juvenile property. The project would not involve the use of hazardous materials or release hazardous materials into the environment. However, because of evidence of leakage in 1997, four 1,000-gallon underground storage tanks (USTs) were removed from within the area of the juvenile facility. Soil samples indicated that an unauthorized release occurred from one of the tanks. The result was methyl tertiary-butyl ether (MTBE) (a component of petroleum) plume southwest of the former tank (near the middle of the former DJJ compound). From 1997 to 2006 there have been significant soil excavations and removal, additional site assessments, and groundwater monitoring. Because of the removal of an extensive amount of contaminated soil the site now is below the threshold for additional remediation. The area is monitored twice a year and reported to the regional water quality control board.

In addition, there is the potential for the presence of asbestos and lead-containing construction material throughout the entire facility, especially the older structures. Both construction and operation of the facilities could expose construction workers, prison employees, and inmates to these materials if they are not removed in an appropriate manner. The EIR will address the testing and required remediation of all such materials to prevent human exposure or release to the environment.

The area associated with the existing CAL FIRE Los Robles Conservation Camp and the land to be designated for a future expanded conservation camp is not reported to have any groundwater or soil contamination. The area planned for the secure reentry facility is also not reported to have any groundwater or soil contamination.

The Paso Robles Municipal Airport is located directly east/northeast of the project site across Airport Road (Exhibit 2). The EIR will assess the project's compatibility with the airport operations as well as the Paso Robles Municipal Airport Land Use Plan.

Hydrology and Water Quality

Potable water has historically been provided by two on-site wells (one additional well is abandoned and another is backup), a chlorination system, and storage tanks. The former juvenile facility also provides water to the city's adjacent sewer lift station. The EIR will describe the project's effect on the hydrology and water quality characteristics of the project area including alteration of drainage patterns, erosion, storm water discharges, the potential to connect to local municipal water systems, and casual (shallow) flooding.

The EIR will identify the requirements for preventing soil erosion during construction and during the operation of the three new proposed facilities.

Land Use and Planning

The EIR will describe and analyze the effect of changes that would occur as a result of the three project proposals on adjacent land uses and consistency with local general planning designations/goals. The EIR will also assess the consistency for the three project components with the master plan for the airport and airport runway operations.

Noise

The EIR will describe the project's construction and operational noise effects and will compare these effects to applicable noise standards. The effect of noise generated by aircraft operations will be assessed for all three components of the project.

Employment, Population and Housing, and Community Services

The EIR will evaluate the project's effect on employment, population, housing, and community services including police, emergency, medical, fire protection and schools in the local area based on projections of project employment and distribution of their residences. The EIR will address potential changes in the need for emergency services and the use of local hospitals in the case of referrals outside the prison given the older age of the inmates proposed at the Estrella facility. It will also be determined if the project has the potential to induce substantial new housing development, and if so, whether such development could have a significant environmental impact.

Recreation

CDCR does not believe the project would have an adverse effect on recreation in the general vicinity; this issue will be identified as an effect found to be less than significant in the EIR.

Transportation and Traffic

The EIR will evaluate the project's effect on local and regional transportation facilities, including Airport Road, the new and old alignment of Dry Creek Road west of Airport Road, and the intersection of SR 46 and Airport Road, based on a transportation analysis that will assess existing and projected employee/vendor/visitor trips, access, and parking. A traffic study will be prepared that will separately address the effects of each of the three components, the total effects of the three components, and the cumulative effects of this and other relevant regional projects. CDCR anticipates preparing the traffic study in a manner that will meet the typical requirements of traffic studies directed by the City of Paso Robles and California Department of Transportation, District 5. Both agencies will be specifically consulted on the scope of these studies during the NOP process. The baseline for the traffic analysis will take into consideration the traffic generated by the former juvenile facility and the existing staffing at the CAL FIRE facility.

The traffic section will also evaluate the proposed access points for staff, delivery, and visitor vehicles into the Estrella facility, existing and future conservation camp, and secure reentry facility. This section will assess the feasibility of using the two existing roads into the site from Airport Road (e.g., Dry Creek Road and the CAL FIRE driveway), the potential for providing turn lanes on Airport Road, and alternative access points into the parcel. This section of the traffic analysis will include specific consultation with the City of Paso Robles transportation representatives.

Utilities

The EIR will analyze the current capacity of the water, wastewater, and electrical systems and the project's net new demand on these systems. An analysis of local water supply conditions will be provided. The EIR will describe the existing gas and electrical facilities within the project vicinity, and provide an impact analysis of the utility line construction. The EIR will also describe the existing solid waste facilities that serve the site and their ability to serve the projects.

From: Hershberger, Jane
To: MacKenzie, Nancy; Jakobs, Gary; Olekszulin, Amanda; Stoner, Kristen
Cc: Sleppy, Bob; Henrikson, John; Giannini, Nick; Simcoe, Geoffrey
Subject: FW: CDCR EIR NOP Comments
Date: Tuesday, October 13, 2009 1:23:19 PM

Here is an additional NOP comment received from Ron Whisenand, Paso Robles Community Development Director.

Jane

Jane Hershberger
Senior Environmental Planner
(916) 255-2236

From: Ron Whisenand [mailto:RWhisenand@prcity.com]
Sent: Tuesday, October 13, 2009 8:40 AM
To: Hershberger, Jane
Cc: Sleppy, Bob; Jim App; Lisa Solomon; Doug Monn; Christopher Alakel; Matt Thompson
Subject: RE: CDCR EIR NOP Comments

Jane:

I should add one additional issue on utilities. When I established a list of environmental issues for Bob several months ago, I included our concern that the existing sewer lift station may not be adequately sized for expanded CDCR facilities. I know that Bob is aware of this issue. I see from the NOP that the lift station is identified as one of the existing facilities. I also note that the utilities section provides general reference to capacity. The City would request that the EIR consultant pay particular attention to lift station capacity. City contact information for this issue should be directed to Doug Monn, Public Works Director and Matt Thompson, Wastewater Division Manager.

Thanks again.

Ron

From: Ron Whisenand
Sent: Monday, October 12, 2009 4:14 PM
To: Hershberger, Jane
Cc: 'Sleppy, Bob'; Jim App; Lisa Solomon; Doug Monn; Christopher Alakel
Subject: CDCR EIR NOP Comments

Jane:

Thanks for sharing a copy of CDCR's Notice of Preparation for the Estrella Correctional Facility EIR. All in all the NOP was very well prepared and addressed all of the environmental issues that the City and Mr. Sleppy have been working on. I did note in the Hydrology and Utilities sections that water supply will be studied. However, I didn't see specific mention of the impacts that water withdrawls from your two existing wells for a renovated and expanded facility will have on the local groundwater basin which is approaching "safe annual yield." The issue of capacity of the regional groundwater basin is a local concern and should clearly be studied as part of this EIR. I have copied this email to Christopher Alakel, our Water Division Manager who would be a good contact for you and the EIR author in terms of Paso Robles groundwater details.

Thanks again for allowing us to review and comment on the document. We look forward to the release of the Draft EIR.

Ronald Whisenand

Community Development Director

City of El Paso de Robles

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PUBLIC WORKS

Paavo Ogren, Director

County Government Center, Room 207 • San Luis Obispo CA 93408 • (805) 781-5252
Fax (805) 781-1229 email address: pwd@co.slo.ca.us

Date: October 20, 2009

To: Ms. Jane Hershberger, Senior Environmental Planner
Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

From: Glenn Marshall, Development Services Engineer

Subject: Notice of Preparation – Paso Robles Property Master Re-Use Plan, 4545 Airport Road, Paso Robles, CA 93446

Thank you for the opportunity to provide information on the Notice of Preparation of an Environmental Impact Report for the subject project. It has been reviewed by several divisions of Public Works, and this represents our consolidated response.

1. Contact person: Glenn Marshall, County Government Center Room 207, San Luis Obispo CA 93408. (805) 781-1596, gdmarshall@co.slo.ca.us.

2. Within the unincorporated areas the County Public Works reviews required public improvements including streets and utilities, as well as drainage and flood hazard, under the provisions of the Real Property Division Ordinance and the Land Use Ordinance.

3. For our use, the report must address potential project impacts to county infrastructure with respect to traffic and circulation, and drainage and flood hazard. The Transportation and Traffic section does not include coordinating the traffic study with County Public Works nor does it address county maintained roads northerly of the project site including Airport Road, Estrella Road, and River Road.

4. A list of "Standard Conditions" is available from our office and available upon request. Minimum conditions would include road improvements, drainage improvements, utility improvements, and maintenance requirements of the new improvements.

5. The following information may be relevant for consideration in the EIR:
   a. San Luis Obispo County Public Improvement Standards.
   b. County Traffic Impact Study Policies (revised 3/26/07)
   c. County of San Luis Obispo July 2008 Pavement Report.
   d. County of San Luis Obispo National Pollutant Discharge Elimination System Phase II, Stormwater Management Program (County Code Section 8.68)
   e. Flood Insurance Rate Maps (FIRM), August 2008.

Please provide us notification that the Draft EIR is available for review via the web and the related web address where the document may be viewed. If you have any questions or comments I can be contacted by phone at 805/781-1596, by email at (gdmarshall@co.slo.ca.us), or at the above address.

Cc: Frank Honeycutt, Transportation & Roads Division

V:_DEVSERV Referrals_Referral Responses\NOPs\NOP Paso Youth Cntr Re-use Plan.doc

ENVIRONMENTAL IMPACT REPORT
Public Hearing for the Draft EIR for the
Paso Robles Property Master Reuse Plan Project

COMMENTS

(please hand in during the meeting)

Name: CAROL M MORRISON
Organization (if any): Central Coast Christian Org (Emmanuel Team)
Address (optional): 4530 BUENA VISTA DRIVE
City, State, Zip: PASO ROBLES, Ca 93446

CDCR invites you to provide specific comments on the DEIR. Thank you!

Comments - I know I can speak for our Emmanuel Team we will be looking forward to the Emmanuel weekends again. I'll pass all the information to our President & Board members of Emmanuel Team. Very Good presentation. I would like to be notified of future meetings as nothing was on radio, Paper or TV. I was @ City Council meeting on the 26th & that is how I found out. More Publicity needed.

CM

STATE OF CALIFORNIA

DEPARTMENT OF CORRECTIONS AND REHABILITATION

FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT

PUBLIC WORKSHOP/SCOPING MEETING

REPORTER'S TRANSCRIPT OF PROCEEDINGS

PASO ROBLES, CALIFORNIA

WEDNESDAY, OCTOBER 21, 2009

1:30 P.M. - 7:00 P.M.

REPORTED BY CHRISTINE PLOSSER

CSR NO. 6333, RPR

Page 2

1 APPEARANCES:
2 THE ADMINISTRATIVE DIRECTOR:
3 STATE OF CALIFORNIA DEPARTMENT OF
CORRECTIONS AND REHABILITATION
4 P.O. BOX 942883
SACRAMENTO, CA 94283-0001
5 ROBERT SLEPPY
(916) 255-2159
6
7
8 ALSO PRESENT:
9 GARY D. JAKOBS, AICP
EDAW/AECOM
10
ROB REID, SAN LUIS OBISPO COUNTY
11 SHERIFF-CORONER
12 THOMAS L. JENKINS
OFFICE OF THE SHERIFF
13 COUNTY OF SANTA BARBARA
14 MATT JENKINS
RICK SWAN
15 CAL FIRE - SAN LUIS OBISPO
COUNTY FIRE DEPARTMENT
16
DAVID E. BACIGALUPO
17 STATE OF CALIFORNIA, DEPARTMENT OF
CORRECTIONS AND REHABILITATION
18
CAPTAIN JOE COCKE
19 SAN LUIS OBISPO COUNTY SHERIFF-CORONER
20 JIM BONNEFIELD,
CDCR
21
22 NANCY MACKENZIE
KRISTEN STONER
23 NICK GIANNINI
LAURA ENDERTON
24 GEOFFREY SIMCOE
DEBORAH JOHNSON
25

Page 3

1 AFTERNOON SESSION
2 --OOO--
3 DIRECTOR SLEPPY: IF WE HAVE FOLKS THAT WOULD
4 LIKE TO SPEAK, HAND IN A CARD. WE WOULD LIKE TO KNOW
5 WHO YOU ARE, AND WE'VE GOT A COURT REPORTER WHO IS GOING
6 TO GET EVERY WORD AND PUNCTUATION. TALK CLEARLY IF YOU
7 COULD AND ONE PERSON AT A TIME. WE'RE HERE TO LISTEN TO
8 PRIMARILY YOUR THOUGHTS ON OUR SCOPE OF ISSUES. BUT IF
9 YOU HAVE A GENERAL COMMENT OR CONCERN EXPRESSED, THAT'S
10 FINE. WE WELCOME THAT. YOU CAN REPEAT ISSUES TO MAKE
11 EMPHASIS OR YOU CAN DEFER TO OTHERS. WE DON'T CARE.
12 WE'D LIKE YOU TO STICK TO A SHORT TIME FRAME, BUT
13 OBVIOUSLY WE DON'T HAVE A CROWD.
14 SO WITH THAT, THE MICROPHONE SHOULD BE ON UP
15 THERE, AND YOU CAN JUST STAND UP HERE AND TALK IN FRONT
16 OF US. IF YOU WANT TO JUST TALK PRIVATELY TO THE COURT
17 REPORTER WHEN WE'RE DONE WITH THIS SESSION, YOU CAN JUST
18 SIT WITH HER AND GIVE HER YOUR COMMENTS OR PUT IT ON A
19 PIECE OF PAPER. WE'RE REALLY GLAD YOU'RE HERE.
20 WE HAVE A MEETING THIS EVENING. IF THERE'S AN
21 ORGANIZATION YOU KNOW ABOUT WHO WOULD LIKE TO HAVE US
22 COME TALK TO, BUSINESS ORGANIZATION OR COMMUNITY
23 ORGANIZATION, WE'D BE GLAD WITHIN REASON TO COME BACK
24 AND DO THAT. SO THANK YOU. SO ANYONE WANT TO GET UP
25 AND SPEAK?

Page 4

1 SUPERVISOR MECHAM: JUST ONE QUICK QUESTION.
2 DIRECTOR SLEPPY: THIS IS SUPERVISOR FRANK
3 MECHAM.
4 SUPERVISOR MECHAM: I'M SUPERVISOR MECHAM,
5 FIRST DISTRICT. THE DISCUSSION WITH LOCAL HOSPITALS, IS
6 THERE GOING TO BE ANY IMPACT OR ANY RELATIONSHIP THAT'S
7 GOING TO BE REQUIRED WITH LOCAL HOSPITALS?
8 DIRECTOR SLEPPY: WE ARE SPECIFICALLY --
9 BECAUSE WE ARE NOT BRINGING IN ALL INMATES, ALTHOUGH
10 WE'RE GOING TO SCREEN THEM FOR INMATES THAT TYPICALLY
11 JUST NEED ROUTINE APPLICATION, BUT THEY DON'T GET TO
12 LEAVE THE PRISON. MEDICAL CARE, WE WILL MAKE SURE THE
13 LOCAL HOSPITAL HAS THE CAPACITY. I BELIEVE THE MEDICAL
14 RECEIVER HAS INVESTED SOME FUNDS INTO THE LOCAL
15 HOSPITAL.
16 WE HAVE A SECURED WARD ALREADY. BUT, YES,
17 WE'LL LOOK AT THAT AND AS WELL AS INCREASING 911 CALLS
18 TO THE FACILITY BECAUSE WE DO TEND TO USE LOCAL
19 EMERGENCY SERVICES. SO WE WILL LOOK AT THAT AND MAKE
20 SURE WE'RE NOT UNFAIRLY OVERLOADING I'M SURE WHAT IS A
21 CHALLENGED SYSTEM. THANK YOU FOR REMINDING ME. I
22 NEEDED TO SAY THAT.
23 MS. SUSAN DECARLI: THANK YOU. MY NAME IS
24 SUSAN DECARLI, CITY OF PASO ROBLES. YOU'VE PROBABLY
25 ALREADY HAD NUMEROUS CONVERSATIONS AND I KNOW THAT THE

Page 5

1 COUNCIL'S SUPPORTED YOUR PROJECT TO OUR CITY, BUT FROM
2 THE PLANNING DEPARTMENT, YOU MAY HAVE ALSO HAD
3 CONVERSATIONS WITH THEM. I JUST WANTED TO MENTION TO
4 YOU ITEMS THAT THE SCOPE OF THE PROJECT SHOULD INCLUDE
5 WITHIN THE ENVIRONMENTAL REVIEW.
6 CURRENTLY THE CORNER OF AIRPORT ROAD AND DRY
7 CREEK ROAD IS SOMEWHAT OF AN EYE SORE, SO I WAS CURIOUS
8 TO WHAT EXTENT THERE WILL BE ANY EXTERIOR BUILDING OR
9 SOD RENOVATIONS OR IS IT JUST GOING TO STAY THE SAME,
10 THE EXTENT OF LANDSCAPE SCREENING PERHAPS ON THE
11 EXTERIOR OF THE FENCES.
12 AND IN TERMS OF THE PROJECT ITSELF, YOU
13 MENTIONED AIR QUALITY, CLIMATE CHANGE, GREENHOUSE GAS
14 ANALYSIS. WILL THE PROJECT ENVIRONMENTAL DOCUMENT ALSO
15 BE LOOKING AT ENERGY CONSUMPTION AND WILL THERE BE ANY
16 RENEWABLE ENERGY RESOURCES EITHER ON SITE OR OUTSIDE?
17 JUST CURIOUS IF YOU'RE GOING TO RETROFIT THE EXISTING
18 ENERGY SYSTEMS OR ADD NEW ONES.
19 BIOLOGICALLY YOU MENTIONED BIRDS AND THE
20 ELECTRIC FENCES. THERE ARE A PAIR OF GOLDEN EAGLES THAT
21 ROOST OFF OF GOLDEN HILL ROAD, SO I WANT TO MAKE SURE
22 YOUR BIOLOGISTS CHECK INTO THAT. ALSO, THERE'S OUR
23 FAVORITE KIT FOX THAT RUN AROUND THE AREA. I DON'T KNOW
24 IF THEY HAVE ACCESS TO THE SITE WITH THE FENCE PROGRAM.
25 AGAIN, I'M SURE YOU'RE GOING TO GET YOUR TAKE FROM US

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1 AND FROM OTHER AGENCIES.
2 IN TERMS OF MORE LAND USE COMPATIBILITY
3 ISSUES, IT WOULD BE GREAT TO SEE WHAT YOU'RE GOING TO
4 PROPOSE HERE FOR A LIGHTING PLAN FOR THE BUSINESS PARK
5 AND THE AIRPORT. MAKE SURE THERE'S AN AIRPORT
6 COMPATIBILITY PLAN THERE.
7 AND THEN WE SEE YOU'RE UPDATING THE
8 CIRCULATION ELEMENT WHICH DOES INCLUDE PARALLEL ROUTE
9 STUDY AND SOME CONNECTIONS WITH GOLDEN HILL ROAD OVER TO
10 AIRPORT ROAD.
11 I WAS CURIOUS IF THIS PROJECT IS GOING TO BE
12 PARTICIPATING ON THE BRIDGE CONNECTION TO PROVIDE A NEW
13 PARALLEL ROUTE FOR YOUR STAFF TO AND FROM THE SITE FROM
14 GOLDEN HILL ROAD OUT TO AIRPORT ROAD AND JUST TO MAKE
15 SURE THAT CIRCULATION WITH TRAFFIC TRANSPORTATION
16 ANALYSIS LOOKS AT OUR POLICIES AND CIRCULATION ELEMENT
17 UPDATE. THOSE ARE KIND OF JUST THE CURSORY THINGS THAT
18 ARE INVOLVED IN YOUR PROJECT. I JUST WANTED TO MENTION
19 THOSE ARE SOME OF THE ISSUES THAT SHOULD BE LOOKED INTO
20 WITH ANY PROJECT IN THIS AREA.
21 DIRECTOR SLEPPY: THANK YOU. JUST REAL QUICK
22 ON A COUPLE OF THOSE. WE ARE TRYING TO SEE WHAT WE CAN
23 DO ABOUT LANDSCAPING. OUR DEPARTMENT HAPPENS TO LIKE
24 THE VIEW OF FENCES. WE THINK THEY'RE ATTRACTIVE, BUT
25 OTHERS DON'T. SO WE ARE WORKING ON THAT. GARY JAKOBS

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1 AND HIS FIRM IS VERY PARTICULARLY SKILLED AT PUTTING NET
2 OVER THE TOP OF THE LETHAL FENCE. WE HAVE A LONG-TERM
3 MONITORING PROGRAM. WE HAVE VERY LITTLE BIRD LOSS
4 BECAUSE WE KEEP THAT AREA FROM THE BIRDS GETTING IN
5 THERE. SO WE ARE VERY CONSCIENTIOUS ABOUT THAT. PLUS
6 WE ARE GOING TO PROVIDE A HABITAT OFF IN A CORNER UP
7 THERE. WE'RE TRYING TO OPEN UP SOME OF THAT FENCING
8 THAT WE DON'T ACTUALLY NEED ANY LONGER ALONG THE
9 PROPERTY LINE.
10 THE KIT FOXES, I DON'T THINK THEY GET IN THERE
11 NOW. BUT AT LEAST THEY CAN WANDER THROUGH THERE. WE
12 ARE REALLY GOOD ABOUT CONSERVATION. NICK CAN TALK ABOUT
13 THE NEW FACILITY IF YOU WANT HIM TO. WE TRY TO GO AT A
14 VERY HIGH LEVEL. THE STATE LAWS ARE VERY STRONG ON
15 CONSERVATION, AND GEOFF IS GOING TO DO THE SAME AS HE
16 GOES BACK THROUGH THE OLD FACILITY SITE.
17 I HOPE WE GET PRETTY HIGH MARKS FOR WATER
18 CONSERVATION AND ENERGY CONSERVATION. AND WE WILL LOOK
19 AT THAT, AS WELL AS WE ARE QUITE CONCERNED WITH
20 TRANSPORTATION BECAUSE WE WOULD BE ADDING CARS TO
21 GETTING IN AND OUT OF THERE. AND WE LOOK FORWARD TO
22 WORKING WITH THE CITY ON THAT STUDY.
23 MS. DECARLI: TRANSPORTATION IS NOT JUST
24 AIRPORT ROAD. IT'S GETTING FROM GOLDEN HILL OVER, WHICH
25 COULD EASE UP YOUR CONGESTION.

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1 DIRECTOR SLEPPY: CALTRANS PROMISED TO BUILD
2 AN OVERPASS FOR US BUT APPARENTLY DIDN'T DO IT WHEN WE
3 WERE PLANNING 46. ONLY KIDDING. ANYONE ELSE? WE'RE
4 HERE IF YOU WANT TO TALK TO US INDIVIDUALLY. WE'RE GLAD
5 YOU CAME OUT. WE LOOK FORWARD TO ANYONE ELSE COMING OUT
6 TONIGHT. WE APPRECIATE SUPERVISOR MECHAM SHOWING UP
7 BECAUSE WE KNOW HE HAS A LOT TO DO.
8 (THE AFTERNOON SESSION ENDED AT 2:45 P.M.)
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1 EVENING SESSION
2 --OOO--
3 DIRECTOR SLEPPY: I'M GOING TO GIVE YOU A
4 LITTLE PRESENTATION ABOUT OUR PROJECT. GARY JAKOBS IS
5 HERE TO FOLLOW ME WITH SOME ENVIRONMENTAL INFORMATION.
6 WE'RE GLAD YOU'RE HERE. WE HOPE YOU PASS ON INFORMATION
7 TO OTHERS. DEPARTMENT OF CORRECTIONS AND REHABILITATION
8 IS STARTING -- THIS IS THE VERY START OF THE REQUIRED
9 ENVIRONMENTAL REVIEW PROCESS FOR A PROJECT UNDER
10 CALIFORNIA LAW. THE DEPARTMENT'S JUST LIKE SOMEBODY
11 APPLYING FOR A PERMIT FROM THE CITY OF PASO ROBLES. BUT
12 IN THIS CASE WE ARE THE LEAD AGENCY AND WE HAVE TO GO
13 THROUGH THIS PROCESS THAT PROVIDES INFORMATION TO THE
14 PUBLIC, CITY REGULATORS ON WHAT THE POTENTIAL
15 ENVIRONMENTAL CONSEQUENCES ARE OF US BUILDING THIS
16 PROJECT.
17 WE HAVE A QUICK AGENDA HERE TONIGHT. WE'RE
18 GOING TO TALK FOR A WHILE AND RUN THROUGH SOME SLIDES,
19 AND THEN WE'RE GOING TO GIVE ANYBODY THE OPPORTUNITY TO
20 GIVE US SOME COMMENTS ON THE SCOPE OF ISSUES THAT YOU
21 THINK WE SHOULD ADDRESS IN THE ENVIRONMENTAL IMPACT
22 REPORT AND/OR IF YOU HAVE SOME CONCERNS OR OBJECTIONS
23 ABOUT THE PROJECT. WE HAVE BROUGHT THE WORLD'S EXPERTS
24 ON ALL THE STUFF WE DO TONIGHT. LOOKS LIKE WE HAVE A
25 LOT OF PEOPLE AND WE HAVE A LOT OF EXPERTISE

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1 REPRESENTED. SO I THINK IF YOU HAVE A DIRECT QUESTION,
2 WE SHOULD BE ABLE TO ANSWER IT. SO HERE WE GO.
3 NUMBER ONE, WHO IS ALL UP HERE? WE HAVE THE
4 PEOPLE FROM THE DEPARTMENT OF CORRECTIONS AND
5 REHABILITATION WHO WILL IMPLEMENT THIS PROJECT. WE HAVE
6 A PARTNER IN THIS PROJECT WHICH IS CAL FIRE, MATT
7 JENKINS, WHO WILL BE TALKING ABOUT THE CONSERVATION
8 CAMP. WE HAVE TWO PARTNERS WHO ARE REPRESENTING SANTA
9 BARBARA AND SAN LUIS OBISPO SHERIFFS TONIGHT WHO WILL
10 SPEAK FOR A LITTLE WHILE.
11 WE HAVE OUR GREAT STAFF HERE. WE HAVE PEOPLE
12 WHO KNOW REENTRY, ESPECIALLY ALL THE ISSUES AND HOW
13 WE'RE GOING TO OPERATE. WE HAVE A CUSTODY OFFICER, A
14 GUY WHO WILL ACTUALLY TAKE YOU OUT IN THE PARKING LOT
15 AND SHOW YOU HOW TO USE THE BATON. AND WE HAVE OUR VERY
16 GOOD ENVIRONMENTAL CONSULTANT.
17 WHAT ARE WE TALKING ABOUT BUILDING? WE HAVE
18 ON THAT BOARD BACK THERE -- I'LL SHOW YOU A SLIDE IN A
19 MINUTE. THE STATE OF CALIFORNIA DEPARTMENT OF
20 CORRECTIONS HAS CONTROLLED FOR A LONG TIME, ALMOST OVER
21 50 YEARS, 160 ACRES OFF AIRPORT ROAD THAT FOREVER AND
22 EVER WAS THE BOYS YOUTH AUTHORITY FACILITY THAT DAVE
23 BACK THERE USED TO RUN. THAT PROPERTY IS NOW
24 ESSENTIALLY SURPLUS.
25 THE STATE OF CALIFORNIA HAS SEEN A DRAMATIC

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1 DROP IN THE NUMBER OF WARDS THAT WE HAVE TO TAKE CARE
2 OF. OUR POPULATION HAS GONE FROM 10,000 DOWN TO
3 ACTUALLY UNDER 2,000 RIGHT NOW. SO WE HAVE A LOT OF
4 EXCESS CAPACITY IN OUR JUSTICE FACILITIES STATEWIDE. WE
5 DO NOT SEE THAT POPULATION COMING BACK UP AGAIN BECAUSE
6 THE COUNTY IS TAKING OVER THAT RESPONSIBILITY.
7 IN JULY 2008, WE FORMALLY CLOSED THE PASO
8 ROBLES FACILITY. SO AT THIS POINT IT IS CLOSED DOWN.
9 JOBS ARE GONE, WARDS ARE GONE, AND WE'RE SITTING THERE
10 WITH A PERFECTLY GOOD FACILITY THAT WE BELIEVE CAN BE
11 USED FOR SOMETHING ELSE. AND WHAT THAT SOMETHING ELSE
12 IS PRIMARILY IS TO TAKE THE OLD JUSTICE FACILITY AND
13 MAKE IT INTO AN ADULT CORRECTIONAL FACILITY. LEVEL TWO
14 ONLY. WE'RE GOING TO DO SOME SECURITY IMPROVEMENTS TO
15 MAKE THAT A SECURE FENCE.
16 THE SECOND THING WE WANT TO DO OUT THERE
17 BECAUSE WE HAVE ALL THIS GREAT PROPERTY THAT IS
18 UNENCUMBERED BY DEVELOPMENT, WE WANT TO BUILD A 500-BED
19 SECURE REENTRY FACILITY. THIS IS A NEW FACILITY WE'RE
20 PROPOSING THAT WILL HOPEFULLY REDUCE THE RETURN RATE OF
21 OUR INMATES ONCE THEY'VE BEEN PATROLLED. THIS IS A
22 FACILITY FOR INMATES IN THEIR LAST 12 MONTHS. IT IS A
23 PROGRAM-BASED FACILITY WITH JOB TRAINING, EDUCATION,
24 PERSONAL BEHAVIOR ISSUES. THIS FACILITY WILL SERVE
25 THREE COUNTIES EXCLUSIVELY, SANTA BARBARA, SAN LUIS

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1 OBISPO, AND SAN BENITO.
2 WE HAVE A THIRD PART, WHICH IS AN OPPORTUNITY,
3 AND THAT'S THAT OUR GOOD FRIENDS AT CAL FIRE REALLY NEED
4 A CONSERVATION CAMP IN THIS PART OF THE STATE. THEY
5 DON'T HAVE THE RESOURCES THEY USED TO HAVE WHEN WE HAD
6 THE DJJ FACILITY. RIGHT NOW THEY DON'T HAVE ANY INMATES
7 TO USE EXCEPT OUT AT CMC. SO WE'RE HOPING TO MAKE
8 ENOUGH ROOM WITHIN THE PROPERTY TO PROVIDE A FULL
9 130-BED CONSERVATION CAMP JUST LIKE WE HAD IN THE SIERRA
10 AND OTHER PARTS OF THE STATE.
11 SO HERE'S THE PROPERTY. THERE IT IS. THAT'S
12 THE OLD DJJ FACILITY. THIS IS THE EXISTING CAL FIRE
13 FACILITY THAT'S ACTUALLY THEIR CAMP LESS THE HOUSING
14 UNITS AND KITCHEN FACILITIES. AND THIS IS WHERE WE PUT
15 OUR 500-BED SECURE REENTRY. AIRPORT'S OVER HERE. STATE
16 ROUTE 46 IS DOWN HERE. AIRPORT ROAD GOES UP THE EAST
17 SIDE OF THE FACILITY.
18 WE HAVE A COUPLE OF MINOR PLANS. WE'RE GOING
19 TO USE THIS LOWER TRIANGLE FOR HABITAT PROTECTION.
20 WE'RE GOING TO HAVE PARKING RIGHT HERE. WE DON'T HAVE A
21 LOT OF PLANS FOR THIS PART. IT HAS RESOURCE PROTECTION
22 ISSUES. SO THIS BECOMES OUR ESTRELLA ADULT CORRECTIONAL
23 FACILITY. THIS BECOMES THE CENTRAL COAST REENTRY. THIS
24 BECOMES SOMEDAY A FULL CAL FIRE CONSERVATION CAMP.
25 WHY DO WE NEED TO DO THIS? STATE OF

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1 CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION
2 HAS 33 PRISONS RIGHT NOW. THOSE PRISONS HAVE ABOUT
3 55,000 INMATES. THAT IS WELL OVER WHAT WE CALL THE
4 DESIGN CAPACITY FOR THOSE FACILITIES. A LOT OF THESE
5 FACILITIES ARE OPERATING AT HAVING EVERY CELL WITH TWO
6 INMATES IN IT AND THE LIBRARY AND A LUNCHROOM AND THE
7 GYMNASIUM FULL OF INMATES. THIS IS NOT A GOOD WAY TO
8 RUN FACILITIES. WE DO HAVE COURT CHALLENGES TO
9 OPERATION OF THE FACILITIES, WHICH WE HAVE TO TAKE INTO
10 CONSIDERATION MEDICAL, DENTAL, ACCESS COMPLIANCE. WE'RE
11 ABOUT TO HAVE AN OVERCROWDING ORDER THAT WILL SET US AT
12 ABOUT 140 PERCENT.
13 WE SEE THAT DJJ FACILITY AS A GREAT ECONOMIC
14 OPPORTUNITY. THE STATE ALREADY OWNS IT. IT'S ALREADY
15 ON THE TAX ROLLS. IT'S A REALLY GOOD FACILITY TO USE
16 FOR ADULT CORRECTIONAL. WE SEE THE PROPERTY AS A GREAT
17 PLACE FOR REENTRY BECAUSE WE HAVE THE PROPERTY FOR IT
18 AND WE HAVE A LOT OF INTEREST IN THE THREE COUNTIES WITH
19 REENTRY.
20 ALL OF THIS WILL BE FUNDED SOMEDAY OUT OF THE
21 AB900 2007 AUTHORITY WHICH PROVIDED FOR INFILL
22 CONSTRUCTION AND REENTRY AS WELL AS MEDICAL RECEIVER
23 BEDS. THIS IS THE SINGLE FUNDING SOURCE FOR THIS, AND
24 THIS HAS NOW BEEN DETERMINED TO BE A LEGAL SOURCE OF
25 FUNDS. WE'RE GOING THROUGH BUDGET PROCESS TO START THE

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1 CAPITAL PLANNING FOR THESE TWO PROJECTS RIGHT NOW.
2 WE'RE BACK OUT THERE OFF AIRPORT ROAD, PASO ROBLES.
3 WE'RE IN THE CITY LIMITS SO WE'RE WORKING VERY CLOSELY
4 WITH THE CITY.
5 FIRST PART, ONE MORE TIME. I WANT TO MAKE
6 SURE EVERYBODY KNOWS THIS. WE'RE TALKING ABOUT THE
7 ADVANTAGE OF THE OLD DJJ FACILITY IS THE HOUSING UNITS
8 WORK FOR THIS LOWER LEVEL SECURITY LEVEL TWO INMATE.
9 DORMITORIES. THEY JUST REALLY WORK WELL SO WE DON'T
10 HAVE TO MAKE MANY CHANGES. WE'RE PROPOSING TO BRING NO
11 MORE THAN 1,000 INMATES TO THAT FACILITY. THE BALANCE
12 OF THEM BEING LEVEL TWO, WHICH OUT OF FOUR LEVELS OF
13 SECURITY IT'S THE SECOND LOWEST.
14 WE'RE ALSO GOING TO BRING IN SOME SUPPORT
15 INMATES, LEVEL ONE INMATES THAT WOULD HELP RUN THE
16 FACILITY. PROBABLY WHEN THE DAY'S DONE WE'LL HAVE ABOUT
17 500 PLUS NEW STAFF BACK OUT THERE. THREE WATCHES, SEVEN
18 DAYS A WEEK, 24 HOURS A DAY. WE HAVE A CONSTRUCTION
19 BUDGET OF ABOUT 110 MILLION, SO THERE WILL BE BOTH
20 LONG-TERM ECONOMIC ADVANTAGE TO THE COMMUNITY PLUS THE
21 SHORT-TERM CONSTRUCTION DOLLARS.
22 WE'LL BE CHANGING THE FENCE. WE LOVE FENCING
23 AT THE DEPARTMENT OF CORRECTIONS. WE LOVE FENCING AND
24 GATES AND TOWERS. SO WE'RE GOING TO TAKE WHAT WAS THE
25 PERFECTLY GOOD FACILITY THAT DAVE RAN AND WE'RE GOING TO

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1 ADD OUR STANDARD PERIMETER SECURITY SYSTEM WHICH IS TWO
2 FENCES WITH A LETHAL ELECTRIC FENCE IN BETWEEN THEM. SO
3 WE HAVE TO ADD SOME FENCING. WE HAVE TO DO SOME MINOR
4 MODIFICATIONS TO THE FACILITY. WE HAVE TO ADD TWO
5 OBSERVATION TOWERS, ONE FOR THE PEDESTRIANS AND ONE FOR
6 THE VISITOR AND VEHICULAR TRAFFIC.
7 WE HAVE A REALLY GOOD CLINIC AT THE FACILITY,
8 AND WE THINK THIS CLINIC WILL WORK WELL FOR OLDER
9 INMATES THAT WE TEND TO BRING THERE WHICH DON'T HAVE
10 ACUTE MEDICAL NEEDS, JUST SORT OF STANDARD OUTPATIENT
11 TYPE NEEDS. OUTPATIENT BEING THEY DON'T GET TO LEAVE.
12 THEY GO DOWN TO THE FACILITY. WE HAVE THIS IN THE BACK.
13 THIS IS THE DETAIL. AND WHAT'S INTERESTING IS WE HAVE
14 ALL OF THESE GREAT HOUSING UNITS THAT ARE READY TO GO.
15 WE JUST HAVE TO PUT NEW ROOFS ON THEM. THEY'RE IN GOOD
16 SHAPE.
17 WE HAVE OUR TRADITIONAL 270 WHICH IS A CELL
18 HOUSING UNIT WHICH IS JUST NICE TO HAVE. WE HAVE A NICE
19 NEW CLINIC. BUT WE WOULD HAVE TO PUT A NEW PERIMETER
20 AROUND THE FACILITY. WE DO LOSE SOME TREES ALONG THE
21 WAY, WHICH GARY IS GOING TO TALK ABOUT BECAUSE OF THE
22 WAY THIS WORKS. THE VISITOR ENTRANCE IS ON THE WEST
23 SIDE IN THE FUTURE.
24 I WANT TO MAKE SURE YOU UNDERSTAND WHAT A
25 SECURE COMMUNITY REENTRY FACILITY IS. WE DON'T HAVE ANY

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1 YET, BUT AB900 AUTHORIZES THEM. AND THE IDEA IS THAT WE
2 DO HAVE A TERRIBLE PROBLEM IN CALIFORNIA AND OTHER
3 STATES TOO WHERE INMATES DON'T COME TO US WITH GOOD
4 EDUCATIONS AND GOOD JOB SKILLS. THAT'S MAYBE HOW THEY
5 GOT TO WHERE THEY ARE. BUT AFTER YOU SPEND 10 YEARS IN
6 A LOCKUP WITH VERY LITTLE OPPORTUNITY FOR MUCH OF
7 ANYTHING BECAUSE IT'S OVERCROWDED, YOU COULD WELL BE
8 PAROLED. AND 85 TO 90 PERCENT OF OUR INMATES WILL
9 EVENTUALLY PAROLE.
10 THEY'RE NOT READY FOR THE STREET, AND IT'S
11 PROVEN BY THE FACT HOW QUICKLY THEY REOFFEND AND TEND TO
12 COME BACK INTO THE SYSTEM WITH A NEW CONVICTION OR A
13 REVOCATION OF PAROLE. WE WOULD LIKE TO BUILD
14 FACILITIES -- AND THIS IS ONE EXAMPLE OF THAT -- WHERE
15 THEY GET THEIR LAST 12 MONTHS OF INCARCERATION. THEY
16 GET AN INTENSE FACILITY DEDICATED TO THEM ONLY. 500,
17 NOT OVERCROWDED WITH TEACHERS AND MEDICAL STAFF AND
18 VOCATIONAL EDUCATION STAFF THAT CAN HELP THEM BE MORE
19 PREPARED TO COME OUT ON THE STREET.
20 THESE FACILITIES WOULD NOT BE OPERATED ABOVE
21 500 BEDS. THEY JUST CAN'T BE. THEY ARE DIFFERENT IN
22 THAT THEY DON'T HAVE THE SAME FENCE THAT YOU SEE IN THE
23 OTHER FACILITY BUT IT IS JUST AS SECURE. WE'RE REALLY
24 EXCITED ABOUT THIS. WE HAVE TWO PARTNERS HERE TONIGHT
25 THAT I'M GOING TO ASK TO SAY A FEW WORDS ABOUT REENTRY.

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1 WE JUST THINK THIS IS GOING TO BE A GOOD IDEA. WHEN YOU
2 SEE INMATES COMING OUT NOW, SURELY SOME VOCATIONAL
3 TRAINING AND SOME EDUCATIONAL OPPORTUNITIES HAVE GOT TO
4 PUT THEM IN A BETTER SPOT.
5 THIS FACILITY IS DESIGNED TO ADDRESS THE
6 PAROLE NEEDS FOR THREE COUNTIES. SANTA BARBARA, SAN
7 LUIS OBISPO, AND SAN BENITO HAVE COME TOGETHER TO BE OUR
8 SHARED OPERATORS AND PARTICIPANTS BECAUSE THESE ARE ONLY
9 FOR THESE COUNTIES THAT ARE HAVING PAROLEES COME BACK.
10 THEY ARE NOT FOR THE OTHER COUNTIES IN THE STATE. SAN
11 LUIS OBISPO COUNTY GETS ABOUT 60 INMATES, PAROLEES A
12 MONTH. SO IT HAS A FLOW OF INMATES COMING OUT. IDEALLY
13 A PORTION OF THOSE WILL GET TO GO THROUGH THIS FACILITY.
14 SANTA BARBARA HAS A LOT COMING OUT. SAN BENITO HAS
15 FEWER, BUT THEY ALL HAVE THEM.
16 WE HAVE REPRESENTATIVES FROM SANTA BARBARA AND
17 SAN LUIS OBISPO. DO YOU WANT TO SAY A FEW WORDS?
18 COMMANDER THOMAS JENKINS: I'M COMMANDER TOM
19 JENKINS FROM THE SANTA BARBARA COUNTY SHERIFF. SANTA
20 BARBARA IS REALLY EXCITED ABOUT PARTNERING WITH THE CITY
21 OF PASO ROBLES, SAN BENITO, AND SAN LUIS OBISPO COUNTY
22 ON REENTRY. WE WERE ACTUALLY VERY EARLY IN THE PROCESS
23 OF CDC'S REENTRY THOUGHT PROCESS. WE WERE LOOKING
24 FORWARD TO HAVING A FACILITY IN OUR COUNTY. IT JUST
25 DIDN'T QUITE WORK OUT FOR US. BUT WE'RE EXCITED TO

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1 PARTICIPATE. WE KNOW IT WILL WORK. WE KNOW IT WILL
2 MAKE OUR COMMUNITY SAFER. AND I'M HERE TO ANSWER ANY
3 QUESTIONS AS TO WHY WE PARTNERED DIRECTLY WITH SAN LUIS.
4 WE APPRECIATE THEM BEING A PART OF THIS AND ALLOWING US
5 TO BE PART OF IT.
6 CHIEF DEPUTY REID: HI THERE. MY NAME IS
7 ROB REID. I'M CHIEF DEPUTY WITH THE SHERIFF'S
8 DEPARTMENT HERE IN SAN LUIS OBISPO COUNTY. WE'RE VERY
9 COMMITTED TO THE IDEA OF REENTRY AND THIS REENTRY
10 FACILITY. WE LOOK AT EVERY INMATE OR PAROLEE WHO LEAVES
11 THE STATE SYSTEM THAT ENDS UP COMING BACK TO THE STATE
12 SYSTEM THROUGH RECIDIVISM. THEY COME THROUGH A COUNTY
13 JAIL. SO REDUCING THAT RECIDIVISM WILL REDUCE THE
14 POPULATIONS IN THE COUNTY JAILS TO START WITH. AND THAT
15 DOESN'T JUST SAVE THE COUNTY SOME MONEY. IT SAVES THE
16 STATE MONEY. IT SAVES THE COUNTY BUT IT ALSO SAVES THE
17 TAXPAYERS. SO WE'RE VERY COMMITTED TO THIS REENTRY
18 FACILITY.
19 DIRECTOR SLEPPY: THANK YOU VERY MUCH. THIS
20 IS WHAT'S GOING TO GO OUTSIDE. THIS IS REALLY A SECURE
21 FACILITY. IT HAS ALL THE PRISON-LIKE QUALITIES IN TERMS
22 OF CUSTODY AND PERIMETER SECURITY, BUT IT IS DEVOTED TO
23 PROGRAMMING, GETTING PEOPLE READY TO LEAVE. AND IT'S
24 EXCLUSIVELY FOR THESE THREE COUNTIES, NOT OTHERS. THIS
25 IS THE WAY THE LAW WAS WRITTEN AND THAT'S THE WAY IT

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1 WILL BE.
2 THIS IS OUR FIRST PROPOSED STAND-ALONE. WE
3 HAVE ANOTHER ONE PROPOSED FOR THE ONE IN STOCKTON AT A
4 CLOSED MEN'S FACILITY. WE HAVE FOUR MORE WE'RE WORKING
5 ON IN THE STATE AND IN OTHER COUNTIES. WE WOULD LIKE
6 THESE TO LOOK URBAN. WE DON'T WANT THEM TO LOOK LIKE A
7 PRISON BOTH FOR THE FOLKS COMING INTO THEM AND FOR THE
8 FOLKS LIVING NEXT TO THEM. THIS WILL BE PARTICULARLY
9 VISIBLE. WE'VE DISTINCTLY MADE THESE APPEALING. MORE
10 JAIL-LIKE IN TERMS OF THEIR APPEARANCE.
11 THESE ARE ABOUT A $150 MILLION CONSTRUCTION
12 BUDGET. THESE ALSO HAVE PROBABLY 400 TO 500 STAFF. SO
13 IN TOTAL WE'RE BRINGING 800 TO 900 STAFF POTENTIAL OUT
14 TO THIS PROPERTY. ALL THE SAME INTERIOR BUILDINGS.
15 THIS IS A DIFFERENT EXTERIOR.
16 FIRE CAMP. WE HAVE A UNIQUE OPPORTUNITY, AT
17 LEAST WE THINK WE DO. IN THE OLD DAYS WHEN DAVE WAS
18 RUNNING HIS GREAT FACILITY FOR THE JUVENILE JUSTICE
19 SYSTEM, WE HAD WARDS COME OUT AND GO ON FIRE CREWS AND
20 MAINTENANCE CREWS. THEY LIVED AT THE PASO ROBLES
21 FACILITY. THEY CAME OVER AND GOT PICKED UP BY CAL FIRE
22 BY JENKINS' STAFF AND TAKEN OUT. WE LOST THAT OPTION
23 WHEN DJJ LOST THAT. THE SAME THING IS HAPPENING IN THE
24 OTHER PARTS OF THE STATE.
25 WE ARE ALL TRYING TO PROVIDE A CHANCE TO BRING

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1 LEVEL-ONE INMATES WHICH ARE MINIMUM SECURITY INMATES TO
2 COME OUTSIDE THE PERIMETER AND DO WORK AND REPLACE WHAT
3 WE USED TO HAVE FOR WARDENS. WE ARE TRYING TO DO THIS
4 UNDER TWO SCHEMES. THE FIRST SCHEME IS THAT THE
5 FACILITY ITSELF WILL HAVE A LEVEL-ONE CREW TO PROVIDE
6 MAINTENANCE. AND WE'RE HOPEFUL TO BRING SOME OF THOSE
7 TO SHARE AND BE CONSERVATION CREW MEMBERS THAT CAL FIRE
8 WOULD TAKE OUT.
9 AND THEN SOMEDAY -- THEY ARE ACTUALLY TRYING
10 TO GET THEIR CONSTRUCTION MONEY TOO -- THERE'S ROOM TO
11 BUILD A FULL STAND-ALONE, 130-BED CONSERVATION CAMP. SO
12 THERE WOULD BE AN ADDITIONAL 130 LOW-LEVEL INMATES THAT
13 COULD GO OUT TO FIRES AND GO OUT TO CONSERVATION
14 PROJECTS LOCALLY. THERE'S ROOM TO BUILD IT AT THE BACK
15 OF THE FACILITY. WE'RE GOING TO WORK WITH THEM. IT'S A
16 TOP PRIORITY FOR CAL FIRE TO BUILD A CAMP HERE.
17 I'D LIKE TO INTRODUCE MATT JENKINS WHO'S THE
18 FIRE CHIEF OF SAN LUIS OBISPO COUNTY, CAL FIRE. HE'S
19 GOT A GREAT SPEECH ABOUT THE NEED FOR THIS.
20 CHIEF MATT JENKINS: I THINK YOU JUST MADE MY
21 CASE FOR THIS ALREADY. AGAIN, MATT JENKINS, CHIEF FOR
22 CAL FIRE AND COUNTY FIRE. AND AS BOB SAID, WE DID RUN A
23 CONSERVATION CAMP STAFFED WITH WARDENS OUT AT THE BOYS
24 SCHOOL. WE HAD THREE FACILITIES IN OUR AREA, TWO BEING
25 IN THIS COUNTY, THIS ONE IN PASO ROBLES. WE HAVE ONE AT

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1 CAMP SAN LUIS OBISPO CALLED CUESTA CAMP THAT RUNS WITH
2 INMATES OUT OF THE MEN'S COLONY. AND WE HAVE A THIRD IN
3 VENTURA COUNTY THAT RUNS WITH YOUTH WARDS.
4 THE CLOSURE OF THE LOS ROBLES CAMP DUE TO LACK
5 OF WARDS WAS A PRETTY DEVASTATING BLOW TO THE FIRE
6 SERVICES. WE LOST OVER 120 FIREFIGHTERS. THESE CREWS
7 ARE BOOTS ON THE GROUND, ARE FOLKS THAT DO THE HARD WORK
8 CUTTING THE FIRE LINE. AND THEY ALSO WHEN THEY'RE NOT
9 FIGHTING FIRES DO CONSERVATION PROJECTS CLEARING BRUSH
10 AROUND PUBLIC FACILITIES, AROUND SUBDIVISIONS, CLEARING
11 CREEKS FOR FLOODING. THEY SANDBAG. THEY HELP IN
12 EARTHQUAKES. SO LOSING THOSE FIVE CREWS WAS A PRETTY
13 SERIOUS BLOW.
14 WITH THE DECLINING WARD POPULATION WE'VE LOST
15 A NUMBER OF OUR CREWS IN VENTURA AS WELL. WE'RE
16 ALLOCATED FOR 14 CREWS TO PROTECT THE ENTIRE CENTRAL
17 COAST FROM SOUTHERN MONTEREY COUNTY DOWN TO VENTURA.
18 WE'RE DOWN TO 7 NOW. IT'S REALLY TAKEN ITS TOLL ON US.
19 WE CAN SEE IT ON OUR FIRES.
20 SO WE'RE PRETTY EXCITED ABOUT THIS PROJECT,
21 THE POSSIBILITY OF REACTIVATING THE LOS ROBLES CAMP
22 INITIALLY HOUSING OUR LEVEL-ONE INMATES IN THE
23 INSTITUTION AND RUNNING OUR CREWS WITH OUR EXISTING
24 FACILITIES WHILE WE'RE GETTING OUR PLANS TOGETHER TO
25 CONSTRUCT A STAND-ALONE FACILITY, AND ULTIMATELY THAT'S

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1 THE GOAL OF BOTH AGENCIES. IT WILL CREATE A 130 EXTRA
2 BEDS AND MAKE THOSE CREWS READY FOR IMMEDIATE RESPONSE
3 RATHER THAN HAVING TO GO THROUGH A RATHER COMPLICATED
4 CHECKOUT PROCESS TO GET THEM SECURELY IN AND OUT AND GET
5 THE RIGHT PEOPLE OUT AND THE RIGHT PEOPLE BACK IN AGAIN.
6 SO AGAIN, I'LL SAY WE'RE VERY EXCITED ABOUT SEEING THIS
7 PROJECT GO FORWARD AND GETTING THE FIRE CAMP BACK ON
8 LINE.
9 DIRECTOR SLEPPY: THANK YOU. WE HAVE TO DO
10 THIS STUFF OUT THERE AND WE HAVE TO FIGURE OUT UTILITY
11 UPGRADES, ROADS, HOW TO GET ENTRANCE. WE'RE GOING TO
12 HAVE TO PROPOSE A HABITAT RESTORATION OUT IN THE
13 SOUTHWEST CORNER BECAUSE WE WILL LOSE SOME TREES. THE
14 MASTER PLAN WAS AN IDEA THE CITY PUT FORTH. THEY WANTED
15 TO KNOW ALL THE THINGS WE MIGHT DO ON THIS PROPERTY. SO
16 THAT'S WHY WE'RE DOING ALL THESE PROJECTS IN ONE
17 ENVIRONMENT IMPACT REPORT. ALTHOUGH ALL THREE ARE
18 PRETTY VIABLE FOR CONSTRUCTION.
19 WE'RE ACTUALLY HERE TO TALK ABOUT THE START OF
20 PREPARING AN ENVIRONMENTAL IMPACT REPORT. THE STATE IS
21 COMPELLED TO DO A REPORT THAT TALKS ABOUT WHAT THE
22 POTENTIAL NEGATIVE EFFECTS WOULD BE OF BUILDING THIS AND
23 ALTERNATIVES TO IT AND THE MITIGATION. WE GO THROUGH A
24 PROCESS OF STARTING THIS CALLED PREPARATION. GARY'S
25 COMPANY IS GOING TO PRODUCE A DRAFT ENVIRONMENTAL IMPACT

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1 REPORT WHICH DESCRIBES ALL THESE THINGS, AND THE PUBLIC
2 IS TO COMMENT AND REVIEW THAT WITHIN 45 DAYS, SOME
3 MONTHS FROM NOW. WE'LL HAVE PUBLIC HEARINGS LIKE THIS
4 DURING THAT PROCESS.
5 WE THEN PRODUCE A DOCUMENT THAT RESPONDS TO
6 ALL THOSE COMMENTS. SO IF SOMEBODY SAYS WE DIDN'T COUNT
7 THE TREES RIGHT, WE'LL SEE IF WE CAN COUNT THE TREES
8 RIGHT AND WE COME TO MAKING A DECISION OF WHETHER OR NOT
9 TO DO ONE OR THREE OR TWO OF THESE DIFFERENT PROJECTS ON
10 THE PROPERTY. THAT'S WHAT GETS US INTO THE NEXT STEP OF
11 FORMAL CONSTRUCTION, AWARD AND ACTUAL CONSTRUCTION OF
12 THESE FACILITIES.
13 WE ARE GOING TO HAVE GARY JAKOBS TALK ABOUT
14 WHAT WE BELIEVE WE KNOW HAS TO BE ADDRESSED IN THE EIR.
15 WE ARE WORKING WITH THE CITY OF PASO ROBLES ON THE
16 ENVIRONMENTAL CONSEQUENCES. HE'S GOING TO RUN DOWN THAT
17 LIST A LITTLE BIT. THIS IS IMPORTANT TO GET THE SCOPE
18 RIGHT AT THE BEGINNING OF THE PROCESS. SO THERE'S THE
19 SCHEDULE. SO I'M GOING TO HAND THIS OVER TO MR. JAKOBS.
20 MR. JAKOBS: THANK YOU, BOB.
21 GOOD EVENING AND THANK YOU FOR HAVING US HERE
22 TONIGHT. I WILL TALK ABOUT THE ISSUES THAT WE'RE GOING
23 TO ADDRESS IN THE ENVIRONMENTAL IMPACT REPORT AND I WILL
24 DO MY BEST TO BE BRIEF. WE'RE JUST AT THE START RIGHT
25 NOW. SO THE PROCESS TONIGHT IS AN IMPORTANT PART OF THE

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1 ENVIRONMENTAL IMPACT REPORT, THE NOTICE OF PREPARATION,
2 AND RESPONSES ON THAT DOCUMENT THAT'S OUT ON THE STREET
3 RIGHT NOW THAT ANNOUNCES THAT WE'RE PREPARING AN
4 ENVIRONMENTAL IMPACT REPORT. IT'S ALSO VERY IMPORTANT.
5 SO WHAT WE HEAR TONIGHT WILL HELP FORM THE ENVIRONMENTAL
6 IMPACT REPORT. AND NANCY MACKENZIE BACK THERE HAS EXTRA
7 COPIES OF THE NOTICE OF PREPARATION IF YOU WANT TO SEE
8 THAT.
9 WHAT WILL THE ENVIRONMENTAL IMPACT REPORT
10 EVALUATE? IT WILL LOOK AT THE IMPACTS OF THIS PROJECT
11 ON THE ENVIRONMENT, ON THE PHYSICAL ENVIRONMENTAL
12 CONDITIONS OUT AT THE PROJECT SITE AND IN THE
13 SURROUNDING AREA. THAT'S THE JOB OF AN EIR. IT'S NOT
14 TO LOOK AT SOCIAL ISSUES. SOCIAL ISSUES ARE NOT PART OF
15 THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, ALTHOUGH
16 CERTAINLY THEY ARE ISSUES THAT COME UP AS WE ARE
17 ADDRESSING PROJECT IMPACTS.
18 WE'LL BE LOOKING AT ALL THREE OF THE
19 FACILITIES THAT ARE PROPOSED, THE CAL FIRE FACILITY, THE
20 REENTRY FACILITY, AND THE REUSE OF THE ESTRELLA FACILITY
21 IN OUR EIR. AND WE'LL EVALUATE THE IMPACTS AT THE LEVEL
22 OF DETAIL THAT WOULD ALLOW THE DEPARTMENT OF CORRECTIONS
23 TO DECIDE WHETHER OR NOT TO MOVE FORWARD WITH THE
24 PROJECT BASED ON AT LEAST ITS ENVIRONMENTAL IMPACTS.
25 THIS IS A LIST OF SOME OF THE ISSUES WE'RE

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1 GOING TO ADDRESS. WE'LL BE LOOKING AT AIR QUALITY,
2 CLIMATE CHANGE, GREENHOUSE GAS EMISSIONS. AND IN
3 LOOKING AT CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS,
4 WE'LL BE LOOKING AT ENERGY AND THE USE OF ENERGY AT THE
5 PROJECT SITE AS THAT ALL RELATES TO THESE ISSUES. WE'LL
6 BE LOOKING AT BIOLOGICAL RESOURCES. WHAT ARE WE GOING
7 TO BE EVALUATING? THERE ARE POSSIBLE REMNANT WETLANDS
8 ON THE PROJECT THAT WE WILL BE EVALUATING.
9 AS BOB SAID, A LETHAL ELECTRIFIED FENCE IS
10 BEING PROPOSED. AND THE FENCE IS VERY GOOD AT KEEPING
11 PEOPLE IN THE PRISON, BUT IT IS LETHAL. AND WE'VE BEEN
12 MONITORING THE FENCE FOR SEVERAL YEARS IN CASES
13 THROUGHOUT THE STATE, AND THEY KILL BIRDS AND OTHER
14 WILDLIFE THAT HAPPENS TO FIND THEIR WAY INTO BETWEEN THE
15 TWO PERIMETERS OF THE FENCE. SO WE'LL BE LOOKING AT
16 IMPACTS ASSOCIATED WITH THAT.
17 AS A RESULT SOME OF WHAT WE HAVE FOUND OVER
18 THE YEARS IS THAT VEGETATION, TREES, THINGS LIKE THAT
19 THAT ATTRACT BIRDS ARE THINGS TO AVOID NEAR THE
20 ELECTRIFIED FENCE. SO BECAUSE THE PROJECT CURRENTLY HAS
21 SOME TREES THAT COULD BE ATTRACTIVE TO BIRDS, SOME OF
22 THOSE TREES WILL NEED TO BE REMOVED AS PART OF THE
23 PROJECT. SO WE'LL EVALUATE THE IMPACTS OF REMOVING
24 THOSE TREES TOO. SO IT WILL BE A VERY COMPREHENSIVE
25 DISCUSSION.

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1 WE'LL BE LOOKING AT CULTURAL RESOURCES. THESE
2 ARE ARCHAEOLOGICAL AND HISTORIC RESOURCES THAT WOULD BE
3 AFFECTED. TRANSPORTATION AND TRAFFIC, IN PARTICULAR WE
4 WILL BE LOOKING AT AIRPORT ROAD. AIRPORT ROAD DOES GET
5 SOME CONGESTION AT ITS INTERSECTION WITH HIGHWAY 46.
6 WE'LL BE LOOKING AT PLANS FOR THE ULTIMATE USE OF
7 AIRPORT ROAD AND HOW THIS PROJECT WILL FIT IN AS WELL AS
8 HIGHWAY 46 AND U.S. 101. WE'LL BE LOOKING AT THAT
9 INTERSECTION AND OTHER INTERSECTIONS THAT COULD BE
10 AFFECTED BY THE PROJECT.
11 HYDROLOGY, STORM DRAINAGE, AND FLOOD CONTROL
12 WILL BE STUDIED AS WILL VISUAL RESOURCES, LIGHT AND
13 GLARE. WITH VISUAL RESOURCES, LIGHT AND GLARE, WE KNOW
14 THAT THIS AREA IS IMPORTANT TO THE CITY. IT'S HIGHLY
15 VISIBLE. SO WE'LL BE LOOKING AT KEY VIEWPOINTS OF THE
16 PROJECT SITE, WHAT THE IMPACTS OF THE PROJECT ARE ON
17 THESE VIEWPOINTS, AND IF THERE ARE ANY SIGNIFICANT
18 EFFECTS HOW WE MIGHT BE ABLE TO MODIFY THE VIEWS SO THAT
19 AESTHETIC TREATMENTS ARE PROVIDED TO AT LEAST ENHANCE TO
20 A DEGREE POSSIBLE WHAT WE SEE.
21 LAND USE AND PLANNING WILL CERTAINLY BE
22 EVALUATED AND AGRICULTURAL RESOURCES. WE'LL BE LOOKING
23 AT GEOLOGY, SOILS, SEISMICITY, MINERAL RESOURCES. WE'LL
24 BE LOOKING AT HAZARDS, HAZARDOUS MATERIALS. WE'LL BE
25 LOOKING AT PUBLIC HEALTH EFFECTS.

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1 OTHER ISSUES THAT WILL BE EVALUATED, NOISE.
2 WE'LL BE LOOKING AT EMPLOYMENT POPULATION AND HOUSING.
3 PEOPLE WILL BE MOVING INTO THE AREA, PARTICULARLY
4 CORRECTIONAL OFFICERS. THERE WILL BE NEW OFFICERS THAT
5 WILL BE MOVING INTO THE AREA AND THEIR FAMILIES WILL BE
6 MOVING TO THE AREA TOO. I WANT TO SAY NOW WHILE WE'RE
7 SITTING AT THE TABLE, THE ISSUE OF WHAT ABOUT INMATE
8 FAMILIES? WON'T THEY BE MOVING TO THE AREA TOO? AND
9 CERTAINLY THAT'S AN ISSUE THAT WE HEAR A LOT OF. SO AT
10 LEAST WE WILL EXPLAIN WHAT WE KNOW ABOUT THAT AND WHAT
11 THE EFFECTS COULD BE ON HOUSING AND COMMUNITY SERVICES.
12 WE'LL ALSO BE EVALUATING UTILITIES, WATER USE.
13 GROUNDWATER IS AN IMPORTANT ISSUE HERE. THE FACILITY'S
14 BEEN ON GROUNDWATER FOR AN AWFUL LONG TIME. THERE'S
15 ALSO NEW WINERIES IN THE AREA AND THEY'RE USING
16 GROUNDWATER AND THERE'S A LOT OF COMPETITION ON THAT.
17 SO WE'LL BE EVALUATING THE IMPACTS OF THAT. WE'LL ALSO
18 LOOK AT SEWAGE, THE CITY'S SEWAGE CAPACITY AND HOW THE
19 PROJECT MIGHT AFFECT THAT AS WELL AS OTHER UTILITIES.
20 WITH REGARD TO RECREATION, AS PEOPLE MOVE INTO
21 AN AREA, WE'RE NOT GOING TO BE LOOKING AT RECREATION
22 IMPACTS FROM THE INMATES. THEY'RE GOING TO BE STAYING
23 IN THE FACILITY. BUT WE WILL BE LOOKING AT RECREATION
24 IMPACTS IN THE COMMUNITY ASSOCIATED WITH PEOPLE MOVING
25 IN, CORRECTIONAL OFFICERS AND THEIR FAMILIES MOVING INTO

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1 THE COMMUNITY, AND HOW THAT COULD AFFECT RECREATIONAL
2 RESOURCES IN PASO ROBLES AND THE SURROUNDING AREA.
3 GROWTH AND CUMULATIVE IMPACTS. WE'LL BE
4 LOOKING AT WHETHER THE PROJECT WILL CAUSE GROWTH IN THE
5 COMMUNITY AND WHAT THE IMPACTS OF THAT GROWTH MIGHT BE.
6 FINALLY CUMULATIVE IMPACTS. THESE ARE THE IMPACTS OF
7 THE PROJECT IN COMBINATION WITH OTHER PROJECTS THAT
8 MIGHT BE PROPOSED AT THE SAME TIME THAT TOGETHER COULD
9 RESULT IN GREATER IMPACTS. SO THAT WILL BE EVALUATED
10 TOO. THAT'S A SUMMARY OF WHAT THE EIR WILL BE ABOUT.
11 DIRECTOR SLEPPY: OKAY. THIS IS THE PART
12 WHERE YOU ALL GET TO COME UP AND SAY A FEW WORDS. YOU
13 DON'T HAVE TO GET UP. IF YOU'D LIKE TO STAY AFTERWARDS
14 AND DICTATE SOME COMMENTS TO OUR COURT REPORTER, THAT'S
15 FINE. YOU CAN SEND US A LETTER HANDWRITTEN OR TYPED
16 WITH YOUR CONCERNS. BUT THIS IS A GOOD CHANCE TO GET UP
17 AND TALK ABOUT YOUR CONCERNS, YOUR THOUGHTS ON THE EIR.
18 A COUPLE THINGS I WANT TO MAKE SURE EVERYBODY
19 IS REAL AWARE OF. WE HAVE BEEN ASKED THIS SEVERAL TIMES
20 BY THE CITY. WE'RE ONLY TALKING ABOUT A LEVEL-TWO ADULT
21 POPULATION AT THIS PRISON, AND THAT'S BECAUSE OF THE
22 TYPE OF HOUSING THAT WE HAVE HAD AT THE OLD DJJ
23 FACILITIES. THIS WOULD NOT BE A HIGHER SECURITY
24 LEVEL-THREE OR FOUR PRISON.
25 NUMBER TWO, WE EMBRACE THIS PLANNING PROCESS.

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1 WE HAVEN'T MADE A DECISION YET TO DO THIS. THE LAW
2 COMPELS US TO GO THROUGH THIS PROCESS AND WE WANT TO DO
3 THAT. THE DEPARTMENT IS VERY CONSCIENTIOUS IN THAT
4 PROCESS. WE HOPE THAT EVENTUALLY IF THIS PROJECT IS
5 SUCCESSFUL AND APPROVED, IT WILL BRING A LOT OF JOBS TO
6 TOWN AND SHORT-TERM CONSTRUCTION DOLLARS. AND WE HOPE
7 TO BE A GOOD NEIGHBOR, WHICH THE DJJ CERTAINLY WAS FOR
8 40, 50 YEARS.
9 SO WITH THAT IF SOMEONE WOULD LIKE TO GET UP
10 AND SAY A FEW WORDS OR WE'LL STICK AROUND AFTERWARDS IF
11 YOU WANT TO TALK TO US ONE ON ONE. WE HAVE EVERY
12 RESOURCE HERE. I'D ALSO LIKE TO ACKNOWLEDGE IT'S SO
13 FORTUNATE TO HAVE OUR REPRESENTATIVE FROM CAL FIRE AND
14 JIM AND DAVE BACK THERE WHO ARE CONSTANTLY HELPFUL TO US
15 REGARDLESS OF BEING UP AT NEW PRISON ASSIGNMENTS. SO WE
16 HAVE A GOOD TEAM HERE. THANK YOU. ANYBODY WANT TO
17 TALK? SAY YOUR NAME WOULD BE GOOD.
18 MS. KATHY BARNETT: MY NAME IS KATHY BARNETT.
19 I'M A PASO ROBLES RESIDENT. I THINK SO MANY PEOPLE COME
20 IN REGARDS TO PROTECTING THEIR JOBS. IT DOESN'T SAY A
21 WHOLE LOT OF POSITIVE FOR OUR CITY TONIGHT THAT THERE
22 AREN'T VERY MANY MEMBERS OF OUR CITY HERE ON SUCH AN
23 IMPORTANT MATTER. HOWEVER, I DON'T BELIEVE THAT OUR
24 MEDIA, EITHER THE PASO ROBLES PRESS OR THE TRIBUNE, DID
25 US ANY FAVOR BECAUSE THERE WAS LITTLE NOTIFICATION OF

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1 THIS MEETING.
2 HAVING SAID THAT, THOUGH, I CAN'T SAY THAT I'M
3 IN FAVOR OF THIS PROJECT. HOWEVER, I'VE COME TO ENOUGH
4 CITY PLANNING THINGS THAT THERE'S OTHER THINGS I'M NOT
5 IN FAVOR OF AND LIFE GOES ON. I FIGURE LIFE WILL
6 CONTINUE ON AFTER THIS PRISON STARTS. BUT I WOULD LIKE
7 TO ASK A COUPLE OF QUESTIONS HAVING TO DO WITH THE
8 ENVIRONMENTAL IMPACT.
9 NUMBER ONE, PASO ROBLES RIGHT NOW HAS AN ISSUE
10 HAVING TO DO WITH WATER. WATER IS OF EXTREME IMPORTANCE
11 TO THIS CITY AND THERE'S A LOT OF DISAGREEMENT GOING ON
12 RIGHT NOW. I WANT TO KNOW WHETHER YOU INTEND TO USE OR
13 HAVE ACCESS TO OUR NACIMIENTO WATER PROJECT. I KNOW IT
14 STATES IN YOUR INFORMATION THAT YOU HAVE TWO WELLS OUT
15 THERE. HOWEVER, TO THE EAST IN THE ESTRELLA AREA, WELLS
16 HAVE BEEN GOING DRY. IN SPITE OF PEOPLE DRILLING
17 FURTHER AND FURTHER DOWN, IT'S STILL A DRY AREA.
18 SOMETHING ELSE, I FREQUENTLY LEAVE THE CITY
19 AND COME BACK IN FROM ALL THE DIFFERENT AREAS, NORTH,
20 SOUTH AND COME IN FROM THE EAST. ONE OF THE THINGS THAT
21 I'M NOT ANXIOUS TO COME INTO PASO ROBLES IS TO GLARING
22 LIGHTS. AND I'D LIKE TO KNOW IF THERE'S ANYTHING NEW
23 OUT THERE ON THE MARKET IN WHICH YOU COULD MEDIATE FOR
24 OUR NIGHT SKY. OUR NIGHT SKY HERE IN PASO ROBLES IS ONE
25 OF THE LAST AREAS IN WHICH WE HAVE WHAT'S CALLED A NIGHT

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1 SKY AND CAN SEE THE STARS.
2 I WOULD VERY MUCH LIKE IF SOMEHOW LIGHTS COULD
3 BE FOCUSED DOWNWARD OR LOOK INTO, SAY, THE NEW KINDS OF
4 LIGHTING. SAY OTHER PLACES THAT YOU GO, I'VE BEEN TO
5 ENOUGH PLACES WHERE YOU TRAVEL ON THE HIGHWAY YOU KNOW
6 IMMEDIATELY THAT YOU'RE BY A PRISON. I WOULD PREFER
7 PEOPLE RECOGNIZE PASO ROBLES FOR OAK TREES THAN THE
8 NIGHT SKY BEING DISTURBED BY GLARING LIGHTS FROM A
9 PRISON.
10 I'M ALSO CURIOUS, AND MAYBE THIS PROBABLY
11 DOESN'T HAVE TO DO WITH THE ENVIRONMENTAL IMPACT REPORT.
12 MAYBE HAD NOTHING TO DO WITH THIS AT ALL BY THIS POINT
13 IN TIME. BUT ON THIS SHEET WHERE YOU HAVE ALL THE
14 COLORS AND NUMBERS AND SO FORTH, ESSENTIALLY WHAT IT
15 SHOWS US IS THAT OUR COUNTY IS GETTING A HALF MILLION
16 DOLLARS MORE THAN SANTA BARBARA. HOWEVER, IF I'M
17 READING THESE NUMBERS RIGHT, SANTA BARBARA WILL PROBABLY
18 SEND MORE PRISONERS HERE.
19 I DON'T UNDERSTAND, I GUESS, WHY OTHER THAN I
20 KNOW THAT THERE WAS NEGOTIATIONS FOR A WOMEN'S PRISON
21 DEVELOPMENT, THIS SORT OF THING. I SURE WISH THERE WAS
22 MORE MONEY, THOUGH, COMING INTO SAN LUIS OBISPO COUNTY
23 IN REGARDS TO THIS PROJECT. I DON'T THINK THAT JUST
24 BECAUSE WE GET JOBS THAT THAT'S ENOUGH TO COVER ALL THE
25 IMPACTS.

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1 THE MEMORANDUM OR THE NOTICE, THE MEMO OF
2 UNDERSTANDING FOR THE COUNTY OF SANTA BARBARA, BENITO,
3 AND SAN LUIS OBISPO HAVING TO DO WITH WHERE PRISONERS GO
4 BACK TO UPON RELEASE, YOU MENTIONED FAMILIES MOVING INTO
5 THE AREA. AND THAT HAS HAPPENED MY UNDERSTANDING SAY
6 FOR OUR MEN'S COLONY FAMILIES MOVE THERE. DOES THAT
7 CHANGE ANYTHING AS TO WHERE THESE PRISONERS GO UPON
8 RELEASE? MY UNDERSTANDING IS THAT THEY GO BACK TO THE
9 COUNTY.
10 THEY DON'T NECESSARILY GO BACK TO THE CITY, SO
11 I'M CLEAR ON THAT POINT. BUT WHEN FAMILIES THEN MOVE
12 HERE, I KNOW THE ARGUMENT GOES THAT YOU NEED SUPPORT.
13 YOU NEED ALL THESE WONDERFUL THINGS SAY A FAMILY
14 PROVIDES, BUT IT SEEMS TO ME, THEN, THAT THAT GOES
15 OPPOSITE TO WHAT THE MEMORANDUM IS.
16 ANOTHER THING I'M CONCERNED ABOUT HAS TO DO
17 WITH THE FENCING. YOU MENTIONED A LETHAL FENCE, BUT
18 FROM THE DIAGRAM IT LOOKS LIKE IT ONLY GOES AROUND THE
19 LEVEL-2 AREA. IS THERE ANY KIND OF FENCING THAT GOES
20 AROUND THE REENTRY FACILITY? I PROBABLY AM PRETTY NAIVE
21 ABOUT PRISONERS. HOWEVER, I DON'T CONSIDER THEM BOY
22 SCOUTS. AND MY GUESS MAY BE LACK OF EDUCATION ABOUT
23 THIS TOPIC OR WHATEVER MAKES ME THINK THAT THERE OUGHT
24 TO BE A FENCE.
25 THE OTHER THING IS, I WISH YOU WOULD DESCRIBE

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1 A LITTLE BIT BETTER THIS LETHAL FENCE AS TO WHAT IT
2 ACTUALLY LOOKS LIKE IN REGARDS TO INTERACTION BETWEEN
3 PRISONERS THAT ARE IN THE LEVEL TWO AND THE REENTRY OF
4 HOW MUCH INTERACTION CAN THERE BE EVEN THOUGH THIS FENCE
5 IS THERE. I KNOW A LOT OF INTERACTION GOES ON IN
6 PRISON, SAY, THAT EITHER WE DON'T WANT TO ADMIT TO BUT
7 WE DO ADMIT TO LATER AFTER THINGS HAVE BEEN DONE. SO
8 I'D LIKE TO KNOW A LITTLE BIT MORE ABOUT WHAT THAT FENCE
9 WILL ACTUALLY LOOK LIKE.
10 ANOTHER QUESTION IS HAVING TO DO WITH THE
11 REHAB FACILITY. WHERE WILL THESE EDUCATORS COME FROM?
12 ARE THEY EXPECTED TO COME FROM OUR COMMUNITY? DO THE
13 PRISONERS GO OUT TO OUR COMMUNITY COLLEGE OR DO THEY
14 STAY ON SITE FOR ALL OF THEIR CLASSWORK?
15 I'D ALSO LIKE TO SAY THAT -- I THINK IT WILL
16 HAPPEN IN THE EIR HAVING TO DO WITH THE IMPACT
17 PARTICULARLY ON OUR HOSPITAL FACILITIES. WHEN YOU TELL
18 ME THAT WE ARE GOING TO HAVE A HIGHER AGE POPULATION,
19 FROM MY NURSING BACKGROUND IT TELLS ME YOU'RE TALKING
20 ABOUT PEOPLE THAT HAVE CHRONIC ILLNESSES AND NEED FAR
21 MORE MEDICAL CARE THAN AN OUTPATIENT FACILITY PROVIDES.
22 DO WE END UP GETTING ADDITIONAL FUNDS FOR THAT FOR THE
23 IMPACT ON OUR COMMUNITY?
24 THE OTHER THING IS JUST -- AND IT'S NOT HAVING
25 TO DO WITH THE EIR. CAN YOU BREAK DOWN A LITTLE BIT

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1 MORE THE AGE OF THE PRISONERS FOR THE LEVEL TWO AND THE
2 REENTRY FACILITY, WHAT THOSE WILL BE?
3 I THINK I'VE ASKED ALL OF THE QUESTIONS THAT I
4 WROTE DOWN. I WASN'T QUITE CLEAR WHEN YOU SAID THAT
5 THERE WOULD BE FORMER INMATES COMING TO HELP RUN THE
6 FACILITY. IS THIS THE LEVEL-TWO FACILITY OR IS THIS THE
7 REHAB FACILITY THAT THEY WILL BE HELPING TO RUN?
8 THE OTHER THING IS, DOES THE REHAB FACILITY
9 STAND ON ITS OWN OR DOES IT NEED, SAY, SOME OF THE USE
10 OF THE FACILITY SUCH AS COOKING, LAUNDRY? ARE THESE
11 THINGS THAT ARE SHARED OR DOES IT STAND ALONE?
12 REGARDLESS OF WHETHER I LIKE OR DISLIKE THIS
13 PROGRAM, I REALLY DO APPRECIATE YOU REACHING OUT TO
14 PASO ROBLES. THIS IS NOT THE FIRST TIME THAT YOU HAVE
15 BEEN HERE. YOU'VE BEEN HERE A NUMBER OF TIMES. AND AS
16 FAR AS I'M CONCERNED WHEN IT COMES TO GOVERNMENT
17 MATTERS, A LOT OF TIMES YOU DON'T TO AGREE WITH ME, BUT
18 I CERTAINLY APPRECIATE IT WHEN YOU LISTEN. THANK YOU.
19 DIRECTOR SLEPPY: THANK YOU VERY MUCH. I'M
20 GOING TO TRY TO TOUCH ON A COUPLE OF ISSUES YOU RAISED.
21 I WILL ADDRESS EVERYTHING YOU'RE TALKING ABOUT SO WE'RE
22 GOING TO GO INTO DETAIL. REAL QUICKLY, WE'RE WELL AWARE
23 OF THE WATER ISSUE, AND WE INTEND TO BOTH COMPARE THE
24 USE OF OUR EXISTING WELLS AND ON-SITE RESOURCES WITH
25 CITY SUPPLIED WATER. SO WE WILL VERY SPECIFICALLY

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1 ADDRESS WHERE AND HOW MUCH WATER WE'RE GOING TO USE. WE
2 TEND TO HAVE A LOT OF WATER CONSERVATION REQUIREMENTS
3 FOR THESE FACILITIES.
4 LIGHTING IS VERY SPECIFICALLY AN ISSUE THE EIR
5 WILL ADDRESS. WE TEND TO USE DOWNWARD FACING LIGHTS,
6 AND WE HAVE A PARTICULAR ISSUE WITH THE AIRPORT. WE
7 DON'T WANT TO CONFUSE PILOTS THAT THEY'RE LANDING ON THE
8 WRONG PLACE. SO LIGHTING WILL BE ADDRESSED PRETTY
9 CLOSELY.
10 I MAY GET OUT OF ORDER HERE NOW. THE FAMILIES
11 ON THE REENTRY PROGRAM. BECAUSE THEY ARE ONLY THERE FOR
12 12 MONTHS, IT'S OUR OPINION THAT FAMILIES ARE NOT GOING
13 TO MOVE. THAT WOULD JUST BE NOT WORTH THE TROUBLE TO
14 MOVE. I'M GOING TO HAVE DEBORAH ANSWER THE LAST LEGAL
15 LOCATION. COULD YOU CLARIFY AGAIN WHERE THEY GO,
16 DEBORAH, REGARDLESS OF WHETHER THEIR FAMILY MOVES.
17 MS. JOHNSON: YOU ASKED THE QUESTION ON THE
18 LEVEL TWO'S AND WHO WOULD BE IN LONG TERM. AND IF SOME
19 OF THEIR FAMILIES MAY MOVE HERE, WHERE WOULD THE INMATES
20 THEN PAROLE TO. GENERALLY THEY STILL WILL NEED TO
21 PAROLE TO THEIR COUNTY OF LAST LEGAL RESIDENCE. LET'S
22 SAY IT'S LOS ANGELES. WHILE THEY'RE ON PAROLE IN
23 LOS ANGELES, THEY CAN APPLY IF THEY HAVE A JOB IN A
24 SECURE HOME TO COME BACK UP TO SAN LUIS OBISPO-SANTA
25 BARBARA.

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1 THAT OFTEN DOES NOT HAPPEN WHERE THEY GET A
2 JOB IN L.A. AND THEY STAY THERE. BUT THEY'RE GOING TO
3 BE AT FIRST IN THEIR COUNTY OF LAST LEGAL RESIDENCE FOR
4 GENERALLY ABOUT SIX MONTHS BEFORE THEY CAN POSSIBLY
5 MAYBE BE ABLE TO COME BACK.
6 I WILL SAY THAT IT'S ABOUT A THIRD OF OUR
7 INMATES ARE FROM L.A. THAT'S WHY I'M PICKING L.A.
8 GENERALLY FAMILIES DO NOT TEND TO MOVE TO WHERE THE
9 INMATES ARE. WE DON'T SEE WHEN WE OPEN A NEW
10 INSTITUTION LIKE AN INCREASE IN THE NUMBER OF FAMILIES.
11 IT'S JUST TOO EXPENSE TO MOVE FROM L.A. OR SAN DIEGO UP
12 HERE.
13 ALSO WE'RE LOOKING AT OLDER INMATES. A LOT OF
14 THESE INMATES ARE IN FOR LONG PERIODS OF TIME AND THAT
15 JUST HASN'T BEEN SOMETHING -- I KNOW THAT ACAP THE
16 ASSOCIATION HAS DONE SOME RESEARCH ON THAT, AND WE HAVE
17 GENERALLY FOUND IT'S NOT ALL OF A SUDDEN AN INCREASE OF
18 THE POPULATION OF THE INMATES' FAMILIES.
19 DIRECTOR SLEPPY: THANK YOU. THE AGE OF
20 INMATES AT LEVEL TWO, WHICH I DON'T HAVE A SPECIFIC
21 NUMBER, BUT WE BELIEVE WE ARE TALKING ABOUT OLDER
22 INMATES. BUT THOSE INMATES THAT WE'RE BRINGING IN
23 SPECIFICALLY WOULD NOT HAVE ACUTE CARE CHRONIC PROBLEMS
24 THAT WOULD REQUIRE HOSPITALIZATION. WE'RE BRINGING IN
25 QUITE FRANKLY OUR HEALTHIER LEVEL-TWO OLDER INMATES. WE

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1 HAVE CLINICAL SERVICES OUT THERE AND WE WILL STAFF IT.
2 WE WILL SPECIFICALLY LOOK AT ANY POTENTIAL
3 INCREASE IN HOSPITAL DEMANDS, SERVICE DEMANDS, AND 911
4 DEMANDS. BUT WE ARE NOT INTENDING TO BRING INMATES WHO
5 HAVE A LOT OF CRITICAL CHRONIC CARE NEEDS THAT THEY NEED
6 TO GO TO THE HOSPITAL A LOT. BUT THEY WILL BE OLDER.
7 THEY WILL HAVE OUTPATIENT TYPE SERVICES FOR VARIOUS AND
8 SUNDRY THINGS.
9 THE LETHAL FENCE IS ONLY AROUND THE LEVEL-TWO
10 INSTITUTION. THAT'S BECAUSE IT'S A STANDARD
11 CORRECTIONAL FACILITY. THE LETHAL FENCE IS BARELY
12 VISIBLE. IT'S BETWEEN TWO 12-FOOT-HIGH CYCLONE FENCES,
13 AND IT'S ENCAPSULATED INSIDE THERE. WE HAVE
14 SPECIFICALLY DESIGNED IT, AND YOU CAN STAY AFTER AND JOE
15 CAN TALK ABOUT IT.
16 WE HAVE SPECIFICALLY DESIGNED THE REENTRY,
17 THOUGH, THAT THE BUILDING ENVELOPE IS THE SECURE
18 PERIMETER. SO WE HAVE DOUBLE DOORS. WE'VE GOT CARPORTS
19 WHERE VEHICLES PULL IN AND GATES CLOSE BEHIND THEM. SO
20 THERE'S NEVER AN OPENING AND ACCESS POINT FOR AN INMATE
21 TO GET OUT.
22 SO IT'S VERY SIMILAR TO A JAIL CONSTRUCTION
23 WHERE YOU COME THROUGH ONE DOOR, AND TO GET INTO THE
24 SECURE AREA YOU GO THROUGH ANOTHER DOOR BUT THE FIRST
25 DOOR CLOSES BEHIND YOU. WHEN A VAN COMES IN, THE GATE

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CLOSES BEHIND IT AND IT'S IN A LOCKED AREA. SO THEY ARE BOTH VERY SECURE. WE CAN TALK ABOUT THAT FROM THE SITE PLAN ONE ON ONE.

LAUNDRY SERVICES AND THINGS LIKE THAT WE'RE STILL WORKING THROUGH. THE TWO FACILITIES WILL BE OPERATED STAND-ALONE. WE DO BELIEVE THERE WILL BE CUMULATIVE VALUE IN SHARING SERVICES, BUT WE'RE PLANNING IT FROM THE STANDPOINT OF STAND-ALONE. BUT THERE WILL SURELY BE THE SHARED SERVICES LIKE LAUNDRY AND THINGS LIKE THAT.

THE SCHOOL PROGRAM, NONE OF THESE INMATES IN EITHER FACILITY AND PARTICULARLY THE SECURE REENTRY WILL LEAVE TO GO FOR ANY SERVICE UNTIL THEY ARE PAROLED. SO WHEN THEY COME FROM THEIR 12-MONTH OR 11- OR 10-MONTH COMMISSION, THEY'RE STAYING INSIDE. SO IF THERE ARE ANY EDUCATIONAL OPPORTUNITIES, THOSE FOLKS WILL COME INTO THE FACILITY TO GIVE THOSE CLASSES. RECRUITMENT WILL BE FROM THE STATEWIDE POOL. WE'LL TRY TO RECRUIT LOCALLY, BUT RECRUITABLE EMPLOYEES ARE -- WE ARE UNAWARE OF WHERE THE EMPLOYEES ARE GOING TO COME FROM AT THIS POINT. I THINK THAT'S MY LIST.

SO ANYONE ELSE WANT TO HAVE A FEW WORDS FOR US? OKAY. THANK YOU VERY MUCH. WE'LL STICK AROUND FOR A LITTLE WHILE IF YOU WANT TO COME UP AND ASK QUESTIONS. WE APPRECIATE YOU COMING OUT. IF THERE ARE FOLKS THAT

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ARE INTERESTED IN THIS PROJECT, PLEASE GET THEM MY NAME OR NANCY'S NAME. WE'LL FIGURE OUT HOW TO MEET WITH THEM AND TALK TO THEM. THERE ARE 25 DAYS STILL RUNNING ON THIS NOTICE TO GET YOUR COMMENTS IN, SO WE LOOK FORWARD TO THAT. THANK YOU FOR COMING OUT. WE APPRECIATE OUR LOCAL PARTNERS SHOWING UP TONIGHT. WE APPRECIATE DAVID AND JIM PARTICULARLY. THANK YOU.

(PROCEEDINGS CONCLUDED AT 7:00 P.M.)

--OOO--

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CERTIFICATE OF REPORTER

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I, THE UNDERSIGNED CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, DO HEREBY CERTIFY:

THAT THE FOREGOING PROCEEDINGS WERE TAKEN BEFORE ME AT THE TIME AND PLACE THEREIN SET FORTH. THAT THE PROCEEDINGS WERE RECORDED STENOGRAPHICALLY BY ME AND WERE THEREAFTER TRANSCRIBED UNDER MY DIRECTION; THAT THE FOREGOING IS A TRUE RECORD OF THE PROCEEDINGS AND OF ALL COMMENTS MADE AT THE TIME OF THE PROCEEDINGS.

I FURTHER CERTIFY THAT I AM A DISINTERESTED PERSON AND AM IN NO WAY INTERESTED IN THE OUTCOME OF THESE PROCEEDINGS OR CONNECTED WITH OR RELATED TO ANY OF THE PARTIES.

IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME ON THIS DATE: _____.

_____

CHRISTINE PLOSSER
CSR NO. 6333

90d8d483-726b-4c53-a391-9448fac2047a

1 CERTIFICATE OF REPORTER

2 * * * * *

3 I, THE UNDERSIGNED CERTIFIED SHORTHAND REPORTER IN
4 AND FOR THE STATE OF CALIFORNIA, DO HEREBY CERTIFY:
5 THAT THE FOREGOING PROCEEDINGS WERE TAKEN BEFORE ME
6 AT THE TIME AND PLACE THEREIN SET FORTH. THAT THE
7 PROCEEDINGS WERE RECORDED STENOGRAPHICALLY BY ME AND
8 WERE THEREAFTER TRANSCRIBED UNDER MY DIRECTION; THAT THE
9 FOREGOING IS A TRUE RECORD OF THE PROCEEDINGS AND OF ALL
10 COMMENTS MADE AT THE TIME OF THE PROCEEDINGS.
11 I FURTHER CERTIFY THAT I AM A DISINTERESTED PERSON
12 AND AM IN NO WAY INTERESTED IN THE OUTCOME OF THESE
13 PROCEEDINGS OR CONNECTED WITH OR RELATED TO ANY OF THE
14 PARTIES.
15 IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME ON
16 THIS DATE: November 4, 2009.
17
18
19 Christine Plosser
CHRISTINE PLOSSER
20 CSR NO. 6333
21
22
23
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25

From: Hershberger, Jane
To: Olekszulin, Amanda; Stoner, Kristen; Jakobs, Gary; MacKenzie, Nancy
Cc: Sleppy, Bob
Subject: FW: CDCR Water Issues
Date: Friday, October 23, 2009 7:19:45 AM
Attachments: Environmental Impacts Memo (6).doc

Please see the message below from Ron Whisenand to Bob regarding potential water supply and groundwater basin impacts related to the project.

Thanks,
Jane

From: Ron Whisenand [mailto:RWhisenand@prcity.com]
Sent: Thursday, October 22, 2009 3:41 PM
To: Sleppy, Bob; Hershberger, Jane
Cc: Frank Mecham; Council; Jim App; Doug Monn
Subject: CDCR Water Issues

Bob:

Supervisor Mecham stopped by my office and suggested that I touch base with you regarding the City's and County's concern for water supply impacts for CDCR's prison reuse plan. You will recall an email exchange that we had back on Oct. 13th (below) where I clarified the City's concern over the impacts of pumping from the groundwater basin to meet the needs of your facility. Furthermore and as stated in the attached memo to you and the Council, the capacity of the groundwater basin has changed significantly since your wells were drilled many years ago. A full assessment of water needed for your planned inmate population and staff will be necessary. Our Water Division staff will be more than happy to assist your consultant team in understanding the current status of the basin and reviewing and commenting on their impact analysis.

I want to make sure that this issue has been adequately communicated with you and your environmental consultant and that it will be fully addressed in the project EIR. Please confirm that you understand the concerns and let me know if the City needs to further clarify. Thanks and we're looking forward to assisting you in any way possible.

Ron Whisenand

Community Development Director

City of El Paso de Robles

<<Environmental Impacts Memo (6).doc>>

Bob:

I've attached the correspondence where the issue was discussed with CDCR. Thanks

Ron

From: Sleppy, Bob [mailto:Bob.Sleppy@cdcr.ca.gov]
Sent: Tuesday, October 13, 2009 9:50 AM
To: Ron Whisenand; Hershberger, Jane

Cc: Jim App; Lisa Solomon; Doug Monn; Christopher Alakel; Matt Thompson
Subject: RE: CDCR EIR NOP Comments

Thanks. I never had anything specific on this so we appreciate getting a name to contact.

From: Ron Whisenand [mailto:RWhisenand@prcity.com]
Sent: Tuesday, October 13, 2009 8:40 AM
To: Hershberger, Jane
Cc: Sleppy, Bob; Jim App; Lisa Solomon; Doug Monn; Christopher Alakel; Matt Thompson
Subject: RE: CDCR EIR NOP Comments

Jane:

I should add one additional issue on utilities. When I established a list of environmental issues for Bob several months ago, I included our concern that the existing sewer lift station may not be adequately sized for expanded CDCR facilities. I know that Bob is aware of this issue. I see from the NOP that the lift station is identified as one of the existing facilities. I also note that the utilities section provides general reference to capacity. The City would request that the EIR consultant pay particular attention to lift station capacity. City contact information for this issue should be directed to Doug Monn, Public Works Director and Matt Thompson, Wastewater Division Manager.

Thanks again.

Ron

From: Ron Whisenand
Sent: Monday, October 12, 2009 4:14 PM
To: Hershberger, Jane
Cc: 'Sleppy, Bob'; Jim App; Lisa Solomon; Doug Monn; Christopher Alakel
Subject: CDCR EIR NOP Comments

Jane:

Thanks for sharing a copy of CDCR's Notice of Preparation for the Estrella Correctional Facility EIR. All in all the NOP was very well prepared and addressed all of the environmental issues that the City and Mr. Sleppy have been working on. I did note in the Hydrology and Utilities sections that water supply will be studied. However, I didn't see specific mention of the impacts that water withdrawls from your two existing wells for a renovated and expanded facility will have on the local groundwater basin which is approaching "safe annual yield." The issue of capacity of the regional groundwater basin is a local concern and should clearly be studied as part of this EIR. I have copied this email to Christopher Alakel, our Water Division Manager who would be a good contact for you and the EIR author in terms of Paso Robles groundwater details.

Thanks again for allowing us to review and comment on the document. We look forward to the release of the Draft EIR.

Ronald Whisenand

Community Development Director

City of El Paso de Robles

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS – M.S.#40
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY 711

Flex your power!
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October 28, 2009

Ms. Jane Hershberger
Environmental Planning Section
Office of Facility Planning, Construction and Management
Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

Dear Ms. Hershberger:

California Department of Corrections and Rehabilitation's Notice of Preparation of a Draft Environmental Impact Report for the Paso Robles Property Master Re-Use Plan

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety, noise and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports.

The proposal is for the conversion of the former Division of Juvenile Justice El Paso de Robles Youth Correctional Facility to an adult, medium-security correctional facility. According to the Notice of Preparation (NOP), the entire 160-acre project site is owned by the State of California, California Department of Corrections and Rehabilitation (CDCR). The NOP states that a substantial portion of the existing facility can be reused; however, conversion to an adult correctional facility would require installing a new perimeter security system, two 30-40 foot tall guard towers, new support and administrative facilities, parking and other "physical changes."

The project site is located adjacent to Paso Robles Municipal Airport, approximately 1,500 feet west of the approach end to Runway 1. Paso Robles Municipal is an active airport with approximately 200 based aircraft and over 34,000 annual operations. The site will be subject to aircraft overflights. The proposal must be coordinated with the Airport Manager, Roger Oxborrow, at 805-237-3877, to ensure that the project will be compatible with future as well as existing airport operations. We understand that local Airport regulations discourage aircraft overflight of the prior facility at less than 1,000 feet above ground level.

The project site is in an area heavily impacted by aircraft departure noise from Runway 19. The Draft Environmental Impact Report should address this and include mitigation measures requiring construction techniques to ensure acceptable interior noise levels.

The project site is also located within Paso Robles Municipal Airport's Safety Zone 5 (Traffic Pattern Zone) as designated in the Paso Robles Municipal Airport Land Use Plan (ALUP). The ALUP,

available on-line at http://www.prcity.com/government/departments/publicworks/airport/land-use-plan.asp, states that "Correctional Facilities" are prohibited in Zone 5 as "The associated land use groups are at a level of intensity or density, or location, which presents a significant risk to the safety of persons on the ground or to persons in aircraft overflying the proposed use, or the land use groups are sensitive to anticipated aircraft noise or frequent aircraft overflights." We advise CDCR submit the proposal to the San Luis Obispo County Airport Land Use Commission (ALUC) for consideration.

According to the NOP, the entire "160-acre project site" is owned by the State. In the event that there will be any new acquisition of land and in accordance with California Public Utilities Code (PUC) Section 21655, "Notwithstanding any other provision of law, if the proposed site of any state building or other enclosure is within two miles, measured by air line, of that point on an airport runway, or runway proposed by an airport master plan, which is nearest the site, the state agency or office which proposes to construct the building or other enclosure shall, before acquiring title to property for the new state building or other enclosure site or for an addition to a present site, notify the Department of Transportation, in writing, of the proposed acquisition. The department shall investigate the proposed site and, within 30 working days after receipt of the notice, shall submit to the state agency or office which proposes to construct the building or other enclosure a written report of the investigation and its recommendations concerning acquisition of the site.

If the report of the department does not favor acquisition of the site, no state funds shall be expended for the acquisition of the new state building or other enclosure site, or the expansion of the present site, or for the construction of the state building or other enclosure, provided that the provisions of this section shall not affect title to real property once it is acquired."

PUC Section 21659 prohibits structural hazards on or near airports. The proposal must not result in hazards to flight, such as: obstructions to the navigable airspace required for flight to, from, and around an airport; visual hazards associated with distracting lights, glare, and sources of smoke; and electronic hazards that may interfere with aircraft instruments or radio communication. Structures, including construction cranes, light standards, guard towers, landscape trees, etc., should not be at a height that will result in penetration of the airport imaginary surfaces. The Federal Aviation Administration (FAA) may require the filing of a Notice of Proposed Construction or Alteration (Form 7460-1) for certain project-specific activities in accordance with Federal Aviation Regulations Part 77 "Objects Affecting Navigable Airspace." Form 7460-1 is available on-line at https://oeaaa.faa.gov/oeaaa/external/portal.jsp and should be submitted electronically to the FAA.

We also recommend that construction activities be coordinated with the airport manager to ensure that appropriate action, such as, Notice to Airmen (NOTAM), are publicized sufficiently in advance.

The protection of airports from incompatible land use encroachment is vital to California's economic future. Paso Robles Municipal Airport is an economic asset that should be protected through effective airport land use compatibility planning and awareness. Although the need for compatible and safe land uses near airports is both a local and State issue, airport staff, airport land use commissions and airport land use compatibility plans are key to protecting an airport and the people

residing and working in the vicinity of an airport. Consideration given to the issue of compatible land uses in the vicinity of an airport should help to relieve future conflicts between airports and their neighbors.

These comments reflect the areas of concern to the Division of Aeronautics with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 5 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please call me at (916) 654-5314 or by email at sandy.hesnard@dot.ca.gov.

Sincerely,

SANDY HESNARD
Aviation Environmental Specialist

c: Paso Robles Municipal Airport, San Luis Obispo County ALUC

California Regional Water Quality Control Board

Central Coast Region

Linda S. Adams
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

November 5, 2009

Jane Hershberger
California Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

Dear Ms. Hershberger:

RESPONSE TO NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT FOR THE PASO ROBLES PROPERTY MASTER REUSE PLAN AT 4545 AIRPORT ROAD, PASO ROBLES, SAN LUIS OBISPO COUNTY

Thank you for the opportunity to review the subject document. The Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency under the California Environmental Quality Act (CEQA). We understand the proposed project will be constructed on a 160 acre State owned parcel including the following main construction components: (1) Level II Adult Male Correctional Facility, (2) Reentry Facility, and (3) Cal Fire Conservation Fire Camp. The first component will convert the youth correctional facility to an adult male medium-security correctional facility, which will include the installation of two 12-foot high fences topped with razor wire, a lethal electrified fence, and two 30- to 40-foot high observation towers, and some additional parking. The second component will consist of a community reentry facility that includes a 220,000 square-foot building and parking area. The third component includes an interim conservation camp, requiring no new facilities, which utilizes the existing buildings, and a permanent conservation camp which includes a separate dormitory, mess hall, warehouse, and other fire equipment/support buildings. The Master Reuse Plan will house a total of 1,630 inmates and staff approximately 880 to 900 employees. The California Department of Corrections and Rehabilitation (CDCR) is considering dedicating a portion of the State owned parcel for on-site habitat restoration. Restoration may include valley oak plantings to mitigate for potential loss of mature oak trees during implementation of the construction components.

We understand CDCR plans to analyze in the Environmental Impact Report (EIR) the project's effect on hydrology and water quality, including alteration to drainage patterns, erosion, stormwater discharges, the potential to connect to local municipal water systems, and shallow flooding. The EIR will also identify the requirements for preventing soil erosion during construction and during the operation of the three new proposed facilities. CDCR must apply for coverage under the NPDES Construction Stormwater General Permit (General Permit) prior to commencing construction. Please note that the new General Permit will be in effect July 1, 2010.

We recommend you require Low Impact Development (LID) practices for the proposed project. LID or equivalent methods are necessary to minimize stormwater runoff pollution, stream erosion and sedimentation, and stream channel alteration resulting from many conventional development practices. The individual and cumulative impacts of these practices have degraded, or threaten to degrade, watersheds and stream functions in the Central Coast Region. Alternative practices, including LID, can minimize and prevent this degradation, and may actually improve and restore watersheds.

In addition, the project is subject to the NPDES Phase II Municipal Stormwater Permit (Permit). The Permit requires that pollutant loads from new development and redevelopment be reduced to the Maximum Extent Practicable (MEP) and water quality be protected. In most cases, the MEP and water quality protection standards are not met by conventional site layouts, construction methods, and stormwater conveyance systems with "end of pipe" basins and treatment systems that do not address the changes in volume and rates of stormwater runoff and urban pollutants (including thermal pollution). Low Impact Development practices can meet the MEP and water quality protection standards and are more effective at reducing pollutants in stormwater runoff at a practicable cost.

LID is an alternative land planning and design strategy which minimizes water quality impacts from development by preserving or imitating the natural hydrologic function of the landscape as much as possible. Traditional development strategies have tended to ignore the importance of the land's natural hydrology, shaping the land to fit development objectives and generally treating stormwater as a hazard or a nuisance. Since surface waterbodies have developed physically, chemically, and biologically in equilibrium with existing landforms, traditional development practices have led to a wide range of water quality impacts. By preserving the natural hydrological processes of the landscape, LID (e.g., distributed storage, infiltration, recharge, and base flow) is able to protect water quality, watershed health, and even water supply, more effectively.

LID minimizes water quality impacts through two fundamental approaches: applying land use principles that preserve natural hydrologic function, and incorporating stormwater source controls to imitate natural hydrologic function. The planning principles are most effective when used to set land use objectives at a watershed scale through general plans, zoning, specific plans, conditions of approval, and development standards. In the long term, the Water Board expects projects will follow criteria that are most protective of natural watershed functions unique to the character of the watershed in which the project is located. However, LID can also be extremely effective in the shorter term and for immediate improvement in current development conditions when applied to site design at a project scale.

The Water Board expects projects to incorporate LID now for immediate improvement in current watershed conditions in the Central Coast Region. Below are lists of representative LID planning principles and stormwater source controls.

Planning Principles That Preserve Natural Hydrologic Processes

- Preserve pristine and/or sensitive subwatersheds;
- Set aside lands essential for hydrologic function and watershed protection (e.g., wetlands, floodplains, riparian corridors, mature trees, infiltration zones, etc.);
- Locate/zone land uses on the basis of water quality impacts (i.e., place uses with the greatest potential for pollution where they can do the least harm);
- Cluster development or limit development density to a level which allows the project to maintain pre-development runoff characteristics and leaves sufficient room to incorporate LID source control practices;
- Prohibit channel modification;
- Preserve existing topography, drainage patterns, and waterways; and
- Limit effective impervious area in subwatersheds to no more than 10%.

Stormwater Source Controls That Imitate Natural Hydrologic Function

- Preserve native vegetation;
- Reduce impervious area;
- Use pervious pavements and green roofs wherever practicable;
- Disconnect impervious areas by routing runoff to vegetated or pervious areas (e.g., tree boxes, rain gardens, lawns, buffers, and strips);
- Keep drainage facilities on the surface (instead of using drop inlets and underground pipes);
- Minimize the use of gutters, pipelines, and channels which concentrate and accelerate flow;
- Keep drainage paths long (e.g., with meandering grassy swales);
- Decentralize retention through the use of small, dispersed facilities (e.g., rain gardens); and
- Amend soils to increase soil absorption and infiltration rates.

Water Board staff considers a project that meets the following criteria (inclusive) to be a "Low Impact Development" project:

Preservation of Hydrologic Features. The project maintains important pre-development hydrologic features of the project site, such as wetlands, floodplains, and groundwater recharge areas, to the greatest extent possible. If the areas which serve this purpose cannot be conserved, the project may use structural measures to replace the lost hydraulic functions.

Preservation of Hydrologic Topography. The project maintains watershed divisions and stream channels in their pre-development locations and conditions. Riparian corridors are protected and surface waters are left unmodified to the greatest extent possible. The project avoids channel modifications which include such activities as moving the channel to a new location, redesigning the channel

cross-section, altering the stream bed grade, armoring the channel, and constructing low-flow crossings, bridge abutments, or culverts.

Runoff Volume Control. The project maintains the pre-development stormwater runoff volume by minimizing site disturbance and providing distributed retention Best Management Practices (BMPs). Retention BMPs are structural or non-structural practices that retain the excess runoff (above pre-development project volumes) from the development for a range of storm events (e.g., the 2-, 10-, and 25-year, 24-hour duration storms). Note that "retention" is required, as opposed to "detention;" retention may be achieved using infiltration methods and capture-for-use methods.

Peak Runoff Rate Control. The project maintains the pre-development peak runoff discharge rate by maintaining the pre-development time of concentration, and then using retention and/or detention BMPs (e.g., rain gardens and open drainage systems) distributed throughout the site, to control runoff volume. If retention practices are not sufficient to control the peak runoff rate, detention practices may be added.

Flow Frequency Duration Control. The project maintains the pre-development distribution of runoff flow frequencies and durations, to the greatest extent possible, through both volume and peak runoff rate controls.

The Water Board expects the project to incorporate LID planning principles and stormwater source controls unless you can demonstrate that other BMPs are equally effective or would result in a substantial cost savings while still adequately protecting water quality and reducing discharge volume. In order to justify using conventional BMPs based on cost, permittees must show that the cost of low impact development would be prohibitive because the "cost would exceed any benefit to be derived." (State Water Resources Control Board Order No. WQ 2000-11). Studies by the Environmental Protection Agency have shown that LID is generally less expensive than conventional development when applied early enough in project development.

We look forward to seeing and commenting on the Draft EIR and request we be contacted when the document is available. If you have questions, please contact **David Innis at (805) 549-3150 or via email at DBInnis@waterboards.ca.gov, or Phil Hammer at (805)3882.**

Sincerely,

for Roger W. Briggs
Executive Officer

S:\CEQA\Comment Letters\San Luis Obispo County\2009\Master Reuse Plan 4545 Airport Rd Paso Robles - NOP _final.doc

AIR POLLUTION
CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

Post-it® Fax Note 7671	Date 11/9/09	# of pages ▶ 12
To Jane Hershberger	From Gary Arcemont	
Co./Dept. CA Dept of Corrections	Co. San Luis Obispo Co. APCD	
Phone #	Phone # 805 781 5912	
Fax # 916 255 3030	Fax # 805 781 1002	

November 9, 2009

Jane Hershberger
State of California Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento CA 95827

SUBJECT: APCD Comments Regarding the Paso Robles Corrections Property Master Reuse Notice of Preparation for an Environmental Impact Report

Dear Ms. Hershberger,

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the proposed project located at 4545 Airport Road in Paso Robles.

The proposed master plan for the 160-acre, state-owned parcel has 3 principal components, including proposed (1) Estrella Level II Adult Male Correctional Facility; (2) Central Coast Regional Secure Community Reentry Facility; and (3) CAL FIRE Conservation Camp. A description of project components follows.

1. First project component would involve conversion of the former El Paso de Robles Youth Correctional Facility to an adult, medium-security correctional facility. The operational capacity of this facility has been set at approximately 1,000 inmates, including 900 Level II inmates, and 100 Level I minimum security inmates. This project component included installation of enhanced security measures, including two, 12-foot high cyclone fences topped with razor wire, and a lethal electrified fence; and two 30 to 40 foot tall observation towers.

2. Second project component is a proposed secure community reentry facility that would be located immediately west/northwest of the perimeter of the former juvenile facility. The proposed secure community reentry facility would be designed to house a maximum of 500 inmates. The counties of San Luis Obispo, Santa Barbara, and San Benito have committed to cooperating on the operation of the planned reentry facility.

3. Third project component involves proposed operation of a CAL FIRE conservation camp. No new facilities would be required to operate an interim conservation camp. CAL FIRE could run two interim Level I inmate crews (with 17-20 members to a crew)

3433 Roberto Court • San Luis Obispo, CA 93401 • 805-781-5912 • FAX: 805-781-1002
info@slocleanair.org ❖ www.slocleanair.org

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using Level I inmates housed in the Estrella Level II Facility. A permanent stand-alone conservation camp at this location would have the capacity to house approximately 130 Level I inmates, and would include a separate dormitory, mess hall, warehouse and other fire equipment/support buildings.

The following are APCD comments that are pertinent to this project.

1. Contact Persons :

   Andy Mutziger and Gary Arcemont
   Air Pollution Control District
   3433 Roberto Court
   San Luis Obispo, CA 93401
   (805) 781-5912

2. Permit(s) or Approval(s) Authority:

   Existing APCD permits for the Estrella Correctional Facility include:

   - Permit 22-1 Gas Dispensing
   - Permit 351-3 Boilers
   - Permit 927-2 Backup Generators

   Other project equipment or activities may also require statewide registration or an APCD Permit to Operate. Please contact our Engineering Division at (805) 781-5912 for more information.

   Demolition and remodeling activities have potential negative air quality impacts, including issues surrounding proper demolition and disposal of asbestos containing material (ACM). Demolition and remodeling projects are subject to the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (NESHAP), which includes but is not limited to: 1) notification requirements to the APCD, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. Please contact the APCD Enforcement Division at (805) 781-5912 prior to final approval of these types of projects by your agency.

3. Environmental Information:

   The potential air quality impacts should be assessed in the EIR. The current land use has the potential for impacts to local air emissions, ambient air quality, sensitive receptors, and the implementation of the Clean Air Plan (CAP). A complete air quality analysis should be included in the EIR to adequately evaluate the overall air quality impacts associated with implementation of the proposed re-use project. This analysis should address both short-term

(construction) and long-term (operational) emissions impacts (including traditional air pollutants and greenhouse gas emissions) and include the following information:

a. A description of existing air quality and emissions in the impact area, including the attainment status of SLO County relative to State and Federal air quality standards and any existing regulatory restrictions to development. The most recent Clean Air Plan should be consulted for applicable information and the APCD should be consulted to determine if there is more up to date information available.

b. A detailed quantitative air emissions analysis needs to be included as part of the EIR. Any temporary construction impacts, such as fugitive dust and combustion emissions from construction and grading activities, should be quantified and mitigation measures proposed.

c. A qualitative analysis of the air quality impacts should also be conducted. A consistency analysis with the CAP will determine if the emissions resulting from the development will be consistent with the emissions projected in the CAP. The qualitative analysis should be based upon criteria such as prevention of urban sprawl and reduced dependence on automobiles. A finding of Class I impacts could be determined qualitatively. The EIR author should contact the APCD if additional information and guidance is required. All assumptions used should be fully documented in an appendix to the EIR. To aid in the air quality analysis, a traffic study should include the total daily traffic volumes projected. The traffic study results can be used in the qualitative analysis by providing a tool for comparing trip generation between different alternatives and evaluating effectiveness of mitigation methods for reducing traffic impacts.

d. Mitigation measures to reduce air quality impacts from construction and operational phases to a level of insignificance should be specified.

e. A complete emission analysis should be performed on all relevant emission sources, using emission factors from the EPA document AP-42 "Compilation of Air Pollutant Emission Factors", the latest approved version of URBEMIS, EMFAC, OFF-ROAD or other approved emission calculator tools. The emissions analysis should include calculations for estimated emissions of all criteria air pollutants and toxic air contaminants released from the anticipated land use on a quarterly and yearly basis. Documentation of emission factors and all assumptions (i.e. anticipated land uses, average daily trip rate from trip generation studies, etc.) should be provided in an appendix to the EIR. The quantitative analysis should address criteria pollutants, greenhouse gases, toxics and fugitive dust.

f. The EIR should include a range of feasible alternatives to the proposed project that could effectively minimize air quality impacts. A thorough emissions analysis should be conducted for each of the proposed alternatives identified. The EIR author should

contact the SLO County APCD if additional information and guidance is required. All calculations and assumptions used should be fully documented in an appendix to the EIR.

g. Assembly Bill 32, the California Global Warming Solution Act of 2006 and California Governor Schwarzenegger Executive Order S-3-05 (June 1, 2005), both require reductions of greenhouse gases in the State of California. The Governor has recognized mitigation efforts will be necessary to reduce greenhouse gas emissions. In order to address these issues, greenhouse gas emissions should be evaluated in the EIR, and appropriate mitigation identified.

h. If there is the potential to emit toxic or hazardous air pollutants, including diesel exhaust, especially in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at very low levels of emissions. A risk assessment may be required to determine the potential level of risk. The SLO County APCD should be consulted on any project with the potential to emit toxic or hazardous air pollutants.

   Pursuant to the requirements of California Health and Safety Code Section 42301.6 (AB 3205) and Public Resources Code Section 21151.8, subd. (a)(2), any new school or proposed industrial or commercial project site located within 1000 feet of a school must be referred to the SLO County APCD for review.

i. A cumulative impact analysis should be performed to evaluate the combined air quality impacts of this project and impacts from existing and proposed future development in the area. This should encompass all planned construction activities within one mile of the project.

j. The data analyses requested above should address local and regional impacts with respect to maintaining applicable air quality standards. Authors should consult the SLO County APCD to determine if a modeling analysis should be performed and included in the EIR.

If you would like to receive a copy of an example of a recommended format for the qualitative analysis section on air emissions impacts, contact the APCD Planning Division at 781-5912.

4. Permit Stipulations/Conditions:

It is recommended that you refer to the "CEQA Air Quality Handbook" (the Handbook). If you do not have a copy, it can be accessed on the APCD web page (www.slocleanair.org) in the Business Assistance section, listed under Regulations, or a hardcopy can be requested by contacting the APCD. The Handbook provides information on mitigating emissions which should be referenced in the EIR.

5. Alternatives:

Any alternatives described in the EIR should involve the same level of air quality analysis as described in section 3 listed above.

6. Reasonably Foreseeable Projects, Programs or Plans:

The most appropriate standard for assessing the significance of potential air quality impacts for project EIR's is the preparation of a consistency analysis where the proposed project is evaluated against the land use goals, policies, and population projections contained in the CAP. The rationale for requiring the preparation of a consistency analysis is to ensure that the attainment projections developed by the APCD are met and maintained. Failure to comply with the CAP could result in long term air quality impacts. Inability to maintain compliance with the state ozone standard could bear potential negative economic implications for the county's residents and business community. The APCD's CEQA Air Quality Handbook provides guidance for preparing the consistency analysis and recommends evaluation of the following questions:

a) Are the population projections used in the plan or project equal to or less than those used in the most recent CAP for the same area?

b) Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?

c) Have all applicable land use and transportation control measures from the CAP been included in the plan or project to the maximum extent feasible?

The land use and circulation policy areas contained in Appendix E of the APCD's CAP are crucial to the consistency analysis and should be specifically addressed in the EIR. Implementation of these land use planning strategies is the best way to mitigate air quality impacts at the project scale.

These land use planning strategies are:

- Planning Compact Communities
- Providing for Mixed Land Use
- Balancing Jobs and Housing
- Circulation Management Policies and Programs
    - Promoting Accessibility in the Transportation System
    - Promoting Walking and Bicycling
    - Parking Management
    - Transportation Demand Management
    - Communication, Coordination and Monitoring

The formation of compact, pedestrian friendly and more economically self-sufficient communities will reduce automobile trip generation rates and trip lengths.

7. Relevant Information:

As mentioned earlier, the Handbook should be referenced in the EIR for determining the significance of impacts and level of mitigation recommended.

8. Further Comments:

The EIR must address any activities that have the potential to produce air quality impacts to sensitive receptors in the area as described in the following:

CONSTRUCTION PHASE MITIGATION

Construction impacts of this development should be evaluated by running the URBEMIS2007 computer model, a tool for estimating construction emissions related to the development of land uses and/or comparing it against screening models within the APCD's Air Quality Handbook.

Hydrocarbon Contaminated Soil

Should hydrocarbon contaminated soil be encountered during construction activities, the APCD must be notified as soon as possible and no later than 48 hours after affected material is discovered to determine if an APCD Permit will be required. In addition, the following measures shall be implemented immediately after contaminated soil is discovered:

- Covers on storage piles shall be maintained in place at all times in areas not actively involved in soil addition or removal;
- Contaminated soil shall be covered with at least six inches of packed uncontaminated soil or other TPH –non-permeable barrier such as plastic tarp. No headspace shall be allowed where vapors could accumulate;
- Covered piles shall be designed in such a way to eliminate erosion due to wind or water. No openings in the covers are permitted;
- During soil excavation, odors shall not be evident to such a degree as to cause a public nuisance; and,
- Clean soil must be segregated from contaminated soil.

The notification and permitting determination requirements shall be directed to the APCD Enforcement Division at 781-5912.

Developmental Burning

Effective February 25, 2000, **the APCD prohibited developmental burning of vegetative material within San Luis Obispo County**. Under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. This requires prior application, payment of fee based on the size of the project, APCD approval, and issuance of a burn permit by the APCD and the local fire department authority. The applicant is required to furnish the APCD with the study of technical feasibility (which

includes costs and other constraints) at the time of application. If you have any questions regarding these requirements, contact the APCD Enforcement Division at 781-5912.

Demolition Activities

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). **If utility pipelines are scheduled for removal or relocation; or building(s) are removed or renovated this project may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP).** These requirements include but are not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. Please contact the APCD Enforcement Division at 781-5912 for further information.

Dust Control Measures

Construction activities can generate fugitive dust, which could be a nuisance to local residents and businesses in close proximity to the proposed construction site. Dust complaints could result in a violation of the APCD's 402 "Nuisance" Rule. Any project with a grading area greater than 4.0 acres exceeds the APCD's PM_{10} quarterly threshold. **This project should be evaluated to determine whether project emissions exceed this threshold and will comply with all applicable Air Pollution Control District regulations pertaining to the control of fugitive dust (PM10) as contained in section 6.5 of the Air Quality Handbook. All site grading and demolition plans noted shall list the following regulations:**

a. Reduce the amount of the disturbed area where possible,
b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible,
c. All dirt stock pile areas should be sprayed daily as needed,
d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities,
e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating native grass seed and watered until vegetation is established,
f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD,
g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used,
h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site,

i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114,
j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and
k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

All PM10 mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. **The name and telephone number of such persons shall be provided to the APCD prior to land use clearance for map recordation and finished grading of the area.**

Standard NOx Control Measures for Construction Equipment

The standard construction equipment mitigation measures for reducing nitrogen oxide (NOx) emissions are listed below and in section 6.3.1 of the Air Quality Handbook. **These measures are applicable to all projects where construction equipment will be used:**

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- Maximize, to the extent feasible, the use of diesel construction equipment meeting ARB's 1996 and newer certification standard for off-road heavy-duty diesel engines.
- Maximize to the extent feasible, the use of on-road heavy-duty equipment and trucks that meet the ARB's 1998 or newer certification standard for on-road heavy-duty diesel engines.
- All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.

Construction Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities will require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Internal combustion engines;
- Unconfined abrasive blasting operations;

- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

Diesel Idling Restrictions for Construction Phases

The APCD recognizes the public health risk reductions that can be realized by idle limitations for both on and off-road equipment. The following idle restricting measures are required for the construction phase of projects:

a. Idling Restrictions Near Sensitive Receptors for Both On and Off-Road Equipment

1. Staging and queuing areas shall not be located within [illegible]

Signs shall be posted in the designated queuing areas and job sites to remind off-road equipment operators of the 5 minute idling limit.

OPERATIONAL PHASE MITIGATION

Operational Permit Requirements

Based on the project information provided, we are unsure of the types of equipment or activities that may be proposed for this project. Operational sources may require APCD permits. The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- Portable generators and equipment with engines that are 50 hp or greater;
- Chemical product processing and or manufacturing;
- Electrical generation plants or the use of standby generator;
- Food and beverage preparation (primarily coffee roasters);
- Furniture and fixture products;
- Metal industries, fabrication;
- Small scale manufacturing;
- Auto and vehicle repair and painting facilities;
- Fuel dealers;
- Dry cleaning;
- Pipelines;
- Public utility facilities;
- Boilers;
- Internal Combustion Engines;
- Sterilization units(s) using ethylene oxide and incinerator(s);
- Cogeneration facilities;
- Unconfined abrasive blasting operations;
- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

Greenhouse Gas Impacts and Mitigation

Assembly Bill 32, the California Global Warming Solution Act of 2006 and California Governor Schwarzenegger Executive Order S-3-05 (June 1, 2005), both require reductions of greenhouse gases in the State of California. The Governor has recognized, "mitigation efforts will be necessary to reduce greenhouse gas emissions and adaptation efforts will be necessary to prepare Californian for the consequences of global warming". **In order to address this issue, District**

staff recommends that greenhouse gas emissions be evaluated in the EIR and include appropriate mitigation.

The Attorney General requires GHG impact evaluation and the implementation of feasible mitigation at the project level. As such, the project's EIR should evaluate the project's carbon dioxide (CO_2) emissions as well as other GHG sources converted to carbon dioxide equivalents and should identify feasible mitigation that the project shall implement. The GHG impact evaluation should include:

a. The short term GHG impacts from the construction phase amortized over the life of the project (25 years for commercial or industrial facilities) to provide a mechanism for the project to mitigate these impacts by adding these amortized impacts to the operational phase impacts; and
b. The project's operational phase GHG impacts.

The short-term construction and long-term operational GHG impacts should be determined. The URBEMIS model can be used to estimate CO_2 emissions during the both phases of the project. It should be noted that since CO_2 is the only estimated GHG by URBEMIS, this tool underestimates the GHG emissions from a project.

Regarding GHG impact mitigation, the Technical Advisory states:

> The lead agency must impose all mitigation measures that are necessary to reduce GHG emissions to a less than significant level. CEQA does not require mitigation measures that are infeasible for specific legal, economic, technological or other reasons. A lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is "less than significant."

Statewide thresholds have not yet been defined for GHG impacts, however SLO County APCD recommends the implementation of feasible mitigation measures that minimize project related GHG impacts.

Examples of potential measures for this development include:

- Utilize low carbon fuel during construction;
- Replacing support equipment and vehicles that have internal combustion engines with their electric equivalents;
- Implement trip reduction programs for workers to reduce vehicle trips thereby reducing greenhouse gases and other criteria pollutants.
- Include pedestrian amenities that provide improved connectivity to existing amenities;
- Securing shuttle services;
- Improving the energy efficiency;
- Green building techniques such as:
  - Building positioning and engineering that eliminate or minimize the development's active heating and cooling needs;

- Implementing solar systems to reduce energy needs;
- Increase the building energy efficiency rating by 10% above what is required by Title 24 requirements. This can be accomplished in a number of ways (increasing attic, wall, or floor insulation, installing high efficiency windows, using efficient interior lighting and energy star roofs and appliances, etc.)
- Native shade tree planting along southern exposures of buildings to reduce summer cooling needs;
- Planting of native, drought resistant landscaping;
- Use of locally or nearby produced building materials to cut down on transportation emissions;
- Use of renewable or reclaimed building materials;
- Installing outdoor electrical outlets to encourage the use of electric appliances and tools;
- Reduce hauling activities to the extent possible by reusing materials on site; and
- Balance cut and fill on site to reduce the need to hauling materials offsite.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at 781-5912.

Sincerely,

Gary Arcemont
Air Quality Specialist

GJA/arr

cc: Karen Brooks, Enforcement Division, APCD
Tim Fuhs, Enforcement Division, APCD
Gary Willey, Engineering Division, APCD

Attachments:

h:\plan\cnqe\project review\3000\3500\3572-1\3572-1.doc

From:	MacKenzie, Nancy
To:	Hershberger, Jane; Sleppy, Bob; Jakobs, Gary; Olekszulin, Amanda; Stoner, Kristen
Cc:	Giannini, Nick; Simcoe, Geoffrey; Henrikson, John
Subject:	RE: NOP Paso Robles Property Re-Use Plan
Date:	Monday, November 09, 2009 10:58:42 AM

Bob, please respond. I believe that the number of fire crews (two) that were designated in the NOP were determined after your conversations with Carl and other CDCR staff, and you have discussed that number and justification with CALFIRE.

Nancy MacKenzie
Environmental Planning Section
Facilities Planning, Construction, and Management, CDCR
9838 Old Placerville Road, Suite B
Sacramento, CA 95827
916-255-2159 FAX (916) 255-3030

From: Hershberger, Jane
Sent: Monday, November 09, 2009 10:31 AM
To: Sleppy, Bob; MacKenzie, Nancy; Jakobs, Gary; 'Olekszulin, Amanda'; 'Stoner, Kristen'
Cc: Giannini, Nick; Simcoe, Geoffrey; Henrikson, John; 'Pete.Peisch@fire.ca.gov'; 'Jenkins, Matt'; 'Foster, Dan'
Subject: FW: NOP Paso Robles Property Re-Use Plan

Please see email below with NOP / EIR scoping comment received from Pete Peisch of CAL FIRE.

Thank you,
Jane

Jane Hershberger
Senior Environmental Planner
(916) 255-2236

From: Peisch, Pete [mailto:Pete.Peisch@fire.ca.gov]
Sent: Monday, November 09, 2009 10:09 AM
To: Hershberger, Jane
Cc: Jenkins, Matt; Delap, Lee; Foster, Dan; Sendek, Dan; Robertson, Allen
Subject: NOP Paso Robles Property Re-Use Plan

Jane - Following are the California Department of Forestry and Fire Protection (CAL FIRE) comments for the Notice of Preparation (NOP) for the CDCR – Paso Robles Property Master Re-Us Plan EIR SCH #2009101039:

The CAL FIRE Conservation Camp facilities project description (Item #3) for the Interim Camp describes the availability of two Fire Crews working from the existing Conservation Camp. This number of crews is incorrect and should be changed to “up to five Level 1 inmate Fire Crews” in the NOP so there will not be a discrepancy in the corresponding EIR. During our initial discussions with CDCR and the initial scoping meetings for the operation of the Camp it was agreed that up to five crews could be based at the facility. Using the language “up to five Fire Crews” will reflect the

maximum extent of CAL FIRE's projected use of the site and allow flexibility for both departments until a stand-alone Conservation Camp can be constructed.

The Los Robles Conservation Camp will continue to be a strategic location for Fire Crews in the California central coast area, and maximizing the number of institution based crews to provide fire protection for the public is one of CAL FIRE's top priorities. We look forward to working with CDCR on the Paso Robles Re-Use EIR and as a supporting government agency CAL FIRE would like to be included in the draft EIR development. This will allow us to provide input for our operational requirements (staffing, inmates, facilities, etc.) that will be necessary for the EIR analysis and for public information.

manatt
manatt | phelps | phillips

Susan Hori
Manatt, Phelps & Phillips, LLP
Direct Dial: (714) 371-2528
E-mail: SHori@manatt.com

November 9, 2009

BY E-MAIL JANE.HERSHBERGER@CDCR.CA.GOV

Ms. Jane Hershberger
Senior Environmental Planner, Environmental Planning Section
Office of Facility Planning, Construction and Management
Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

Re: Paso Robles Property Master Re-Use Plan

Dear Ms. Hershberger:

Manatt, Phelps & Phillips, LLP ("Manatt") represents the California Correctional Peace Officers Association ("CCPOA") and submits this letter on their behalf. Manatt has carefully reviewed the Paso Robles Property Master Re-Use Plan ("Plan") Notice of Preparation ("NOP") and has serious concerns about both the form and substance of the Plan's proposed Environmental Impact Report ("EIR"), as explained below.

I. A Program EIR is Required for All AB 900 Re-Entry Projects.

The Plan includes the construction and operation of the 500-bed Central Coast Regional Secure Community Re-entry Facility ("CCRSCF.") The CCRSCF is not a "one-off" improvement project – instead, it is merely one step in a coordinated series of projects currently being planned by the Department of Corrections and Rehabilitation ("CDCR") under Assembly Bill 900 ("AB 900.") (*See* NOP, p. 5.) AB 900 was signed by Governor Schwarzenegger in 2007 and authorized, among other things, $2.6 billion to construct up to 16,000 beds at numerous secure re-entry facilities, like the CCRSCF. Plans are well underway for the construction of re-entry facilities throughout the State to meet this 16,000 bed benchmark. In fact, according to the Population Reduction Plan filed by the State of California with the United States District Court on September 18, 2009 (*See* Exhibit A):

> To date, eleven counties have agreed to locate a reentry facility to serve their population. The first reentry facilities are being planned in the counties of Kern, Madera, San Joaquin (to also serve Amador and Calaveras), San Luis Obispo (to also serve Santa Barbara and San Benito), and San Bernardino. A reentry

> facility planned for San Diego is currently being sited. Additional counties have expressed interest in supporting reentry facilities in their communities.
>
> Assuming no obstacles arise, [the State of California] estimate[s] this program will build approximately 500 beds in or about Fiscal Year 2010-2011, 2,500 additional beds in or about Fiscal Year 2012-2013, 2,500 additional beds in or about Fiscal Year 2013-2014, and 2,500 additional beds in or about Fiscal Year 2014-2015.

(Population Reduction Plan, p. 14.) The San Luis Obispo facility mentioned in the Population Reduction Plan is the facility associated with the Plan. (*See* NOP p. 3.) Therefore, far from being a stand-alone project, the Plan's 500 beds are just one small component (3.1%) of a 16,000-bed master-planned program for which money has been allocated, sites have been selected, and development is being actively pursued.

Given the coordinated nature of AB 900 re-entry facility development, the proposed preparation of the Plan's project-level EIR is inappropriate under the California Environmental Quality Act ("CEQA.") CEQA *requires* preparation of a Program EIR when multiple individual projects that together compose a single project will result in significant environmental impacts. (*See* CEQA Guidelines § 15165.) Here, the Program EIR must evaluate the cumulative effect from the environmental changes that will result from the ultimate 16,000-bed project, and include program-level mitigation measures.

Preparation of a Program EIR for all 16,000 beds will fulfill a number of policy goals envisioned by CEQA, including: (a) providing for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action; (b) ensuring consideration of cumulative impacts that might be slighted in a case-by-case analysis; (c) avoiding duplicative reconsideration of basic policy considerations; (d) allowing for consideration of broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and (e) reducing paperwork. (CEQA Guidelines § 15168.) All of these goals are consistent with the Legislature's intent that CEQA be interpreted in such manner so as to afford the fullest possible protection to the environment. (*See, e.g.,* Friends of Mammoth v. Board of Supervisors, 8 Cal.3d 247 (1972).)

Proceeding with individual project EIRs for each of the facilities contemplated by the State's Population Reduction Plan would constitute project-splitting, or "piecemealing," which is forbidden under CEQA. Under well-established CEQA law, lead agencies are prohibited from splitting a single large project into a number of small pieces in order to avoid environmental

review of the entire project. (*See, e.g.,* Orinda Ass'n v. Board of Supervisors, 182 CA3d 1145 (1986); CEQA Guidelines § 15378.) By considering the Plan in isolation, as the proposed project EIR would do, the Plan's EIR will ignore the cumulative impacts that may result from the development of the remaining AB 900 re-entry facilities.

II. "Valley Fever" (*Coccidiodomycosis*) Should be Addressed in the EIR.

Coccidioidomycosis, also known as "Valley Fever," is a fungal disease caused by Coccidioides species. (Centers for Disease Control and Prevention website, *available at* http://www.cdc.gov/nczved/dfbmd/disease_listing/coccidioidomycosis_gi.html.) Infection occurs when fungal spores become airborne after disturbance of contaminated soil. (*Id.*) People who develop symptoms may experience a flu-like illness, with fever, cough, headache, rash and muscle aches. (*Id.*)

According to a June 2007 report entitled *Recommendation for Coccidioidomycosis Mitigation in Prisons in the Hyperendemic Areas of California* ("Report," *see* Exhibit B), Valley Fever has been recognized in California State inmates since 1919, both inside and outside known endemic areas. As indicated in the Report, portions of San Luis Obispo County (where the Plan site is located) are recognized as endemic areas.

Both the construction and operation of the facilities contemplated by the Plan will generate airborne dust from activities that disturb the soils. Plan buildout would involve grading and excavation, while operation of certain facilities contemplated by the Plan would occur on bare, graded land thereby creating the potential for dust from both wind and vehicles. In the event that Coccidioides species fungal spores are present in the area of the Plan site, both Plan buildout and operation would present a potentially significant air quality impact related to Valley Fever.

Notwithstanding substantial evidence in the Report to suggest a potentially significant air quality impact related to Valley Fever, the NOP completely ignores the issue. Given the high incidence of Valley Fever in prison populations, as well as the location of the Plan site in/near an endemic area and the dust-generating features of the Plan buildout/operation itself, the EIR must analyze this potentially significant environmental impact and, if necessary, implement mitigation measures suggested in the Report (e.g., landscaping with ground cover, placing concrete and other dust reducing materials on the grounds.)

III. The NOP Fails to Set Forth a Cumulative Impact Analysis Scope.

The NOP fails to include any discussion of the EIR's proposed cumulative impacts analysis. Such a cumulative impacts analysis must include—at a minimum— all past, present, and reasonably foreseeable AB 900 re-entry projects, such as those discussed on page 14 of the

Population Reduction Plan. Because all such re-entry projects create a number of related or cumulative impacts, CEQA requires that they be evaluated in the EIR's cumulative impact discussion. (*See* CEQA Guidelines § 15130.)

IV. Conclusion

For the reasons set forth above, we respectfully urge CDCR to prepare a Program EIR for all re-entry facilities funded by AB 900 that includes an analysis of Valley Fever. Manatt also hereby reserves the right to provide additional comments on any future EIR prepared in connection with the Plan. Finally, Manatt requests to be provided copies of all notices published by the CDCR with respect to this Plan and notified of all actions taken by the CDCR in connection with the Plan, including a copy of the Notice of Completion and Notice of Availability of the Draft EIR. All correspondence should be sent to my attention at the mailing address noted in the footer on the first page of this letter.

Very truly yours,

Susan Hori
Manatt, Phelps & Phillips, LLP

cc: David Sanders, Esq.

Enclosures

EXHIBIT A

POPULATION REDUCTION PLAN

EDMUND G. BROWN JR.
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IN THE UNITED STATES DISTRICT COURTS

FOR THE EASTERN DISTRICT OF CALIFORNIA

AND THE NORTHERN DISTRICT OF CALIFORNIA

UNITED STATES DISTRICT COURT COMPOSED OF THREE JUDGES

PURSUANT TO SECTION 2284, TITLE 28 UNITED STATES CODE

RALPH COLEMAN, et al., Plaintiffs, v. ARNOLD SCHWARZENEGGER, et al., Defendants.	No. 2:90-cv-00520 LKK JFM P **THREE-JUDGE COURT**
MARCIANO PLATA, et al., Plaintiffs, v. ARNOLD SCHWARZENEGGER, et al., Defendants.	No. C01-1351 TEH **THREE-JUDGE COURT** **DEFENDANTS' POPULATION REDUCTION PLAN** **To: Three-Judge Court**

On August 4, 2009, the Three-Judge Court ordered Defendants to "provide the Court with a population reduction plan" within 45 days. (*Plata* Doc. 2197.) Defendants filed a notice of appeal and request for stay in the U.S. Supreme Court. (*Plata* Doc. 2224.) The stay was denied by the U.S. Supreme Court on September 11, 2009; the appeal is still pending and a jurisdictional statement will be filed in due course. Therefore, as required by the Three-Judge Court's order, Defendants submit the attached "population reduction plan." (*See* Exhibit A.) Defendants also submit "California Department of Corrections and Rehabilitation Achievements & Improvements Introduced During Three-Judge Court Proceeding." (*See* Exhibit B.)

The submission of the attached "population reduction plan," as required by the Three-Judge Court, is not an admission that this Court's order meets the requirements of the Prison Litigation Reform Act (PLRA). As will be argued in the U.S. Supreme Court, the Three-Judge Court erred in its rulings and orders. Thus, the submission of this plan does not constitute waiver of any issue previously raised before this Court and which may be raised in the U.S. Supreme Court, including, but not limited to, whether the three-judge court was properly convened; whether the Court misconstrued the PLRA's requirement that crowding is the primary cause of the violation of a federal right; whether the population cap of 137.5% satisfies the PLRA's "least intrusive" and "narrowly drawn" requirements; and whether the Court improperly refused to permit the State from introducing evidence "relevant only to determining whether the constitutional violations found by the *Plata* and *Coleman* courts were 'current and ongoing.'"

Dated: September 18, 2009

Respectfully submitted,

EDMUND G. BROWN JR.
Attorney General of California
JONATHAN L. WOLFF
Senior Assistant Attorney General

/s/ Kyle A. Lewis

KYLE A. LEWIS
Deputy Attorney General
Attorneys for Defendants

HANSON BRIDGETT LLP

/s/ Paul B. Mello

Paul B. Mello
Attorneys for Defendants

EXHIBIT A

September 18, 2009 Plan for Prison Population Management as Required by the August 4, 2009 Court Order

PURPOSE AND BACKGROUND

On August 4, 2009, this Court ordered the *Coleman v. Schwarzenegger* and *Plata v. Schwarzenegger* defendants (State Defendants) to "provide the court with a population reduction plan that will in no more than two years reduce the population of the CDCR's [California Department of Corrections and Rehabilitation's] adult institutions to 137.5% of their combined design capacity." Without waiving any appellate rights, State Defendants present this submission to the Three-Judge Court as required by the August 4, 2009 Order.

This "population reduction plan" (Plan) foremost represents the State's course of action to reform the State's prison policies and system. It also outlines the corresponding decrease in prison population that will occur as a result of the reforms identified in the plan. The following list of reforms, which are described in greater detail below, have either been implemented since the Three-Judge Court trial ended in December 2008, or will be implemented due to recent legislation that the Administration worked with the Legislature to obtain:

- **Implemented the Parole Violation Decision Making Instrument Statewide**. *Using scientific research to make evidenced-based decisions to send low risk offenders to appropriate programs and high risk offenders back to prison.*
- **Discharged Deported Parolees.** *Eliminated the wasteful and costly supervision for over 12,000 offenders who should be prosecuted by federal, not state, authorities if they illegally return.*
- **Parole Reform.** *New legislation aimed at reducing the churning and providing for better, targeted parole supervision of the State's most dangerous offenders.*
- **Enhanced Credit Earning.** *New legislation that encourages the completion of rehabilitative programs.*
- **Community Corrections.** *New legislation will provide fiscal incentives to keep low-level offenders local rather than returning them to prison.*
- **Parole Reentry Courts.** *New legislation that allows for intensive monitoring for parole violators in the community rather than returning them to prison.*
- **Increasing the Number of Inmates Housed Out-Of-State.** *Increasing the total number of inmates housed at out-of-state institutions, which currently stands at approximately 8,000.*
- **AB 900 Amendments.** *Recent legislation allows for funding and construction to start. Defendants prevailed in litigation that tried to stall construction*

- **Developed Bed Plan Which Will Increase Capacity to Address Crowding and Health Care Concerns.** *Includes new level IV infill, new healthcare infill, reception center beds, mental health beds, reentry facilities, and the conversion of Department of Juvenile Justice facilities.*

- **Expanding and Improving Clinical Care at Existing Prisons.** *Addressing health care capacity concerns including clinical and program space by allocating $500 million in AB 900 money.*

Since the time of this Court's tentative ruling and with even greater urgency since August 4, 2009, the State Defendants have studied a variety of measures that would reduce the prison population. The State Defendants believe that reducing the prison population to 137.5% within a two-year period cannot be accomplished without unacceptably compromising public safety. However, the Plan submitted here proposes mechanisms to safely reach a population level of 137.5% over time, and will achieve a more efficient capacity within 2-3 years than there is presently.[1]

The Plan has three parts: (1) the Plan describes recently obtained legislative authority and administrative changes designed to reduce the prison population; (2) the Plan describes the construction projects both underway and planned that will, upon completion, increase housing capacity and services to the severely mentally and/or medically ill populations housed in CDCR's instate adult institutions; and (3) the Plan addresses additional planned legislative reforms. CDCR estimates that when it implements the reforms for which it already has authority, the average daily prison population (ADP) at CDCR's adult instate institutions will be reduced by approximately 28,000 in three years. This reduction will result in an estimated population of approximately 155% at the existing 33 adult institutions. The State Defendants anticipate that in five years, the ADP will be reduced by approximately 34,000 resulting in an estimated population of approximately 147%. Moreover, if the Administration's planned legislative reforms are enacted, the crowding rate at the institutions would fall to 139% after three years, and 132% after five years.

Not only will the State lower its population through smart prison reforms and increase operational capacity through prison construction, the State is also committed to building beds specifically for the *Plata* and *Coleman* class members to accelerate the already dramatic improvements in the delivery of healthcare to CDCR's inmate-patients. In fact, over 5,800 beds

[1] That it is theoretically possible to reduce the prison population to 137.5% within two years says nothing about whether it would satisfy all of the PLRA's requirements to do so. For instance, a plan calling for the release of one in every four inmates at random or that inmates draw lots for their release would allow the 137.5% figure to be achieved within two years, if not instantaneously. But there is no doubt that such measures are not required by, much less would they satisfy, the PLRA because, among other reasons, they would provide no assurance of public safety. Thus, to submit a plan that would achieve the full population reduction within two years, without ensuring that the other requirements of the PLRA are satisfied, would be far less appropriate than the plan submitted here.

will be built with the specific and focused purpose of benefiting the class members of these cases. These beds are in addition to approximately 3,700 beds that will be constructed to meet general population needs at existing prisons, and 8,000 beds in reentry facilities throughout the state. Moreover, the general population and reentry beds will also have a full complement of healthcare space. Additionally, the State plans to spend roughly a half billion dollars in a healthcare improvement project at some of the existing institutions, which will accelerate the already dramatic improvements in healthcare delivery. Finally, these efforts will improve the operable capacity in CDCR's adult instate institutions which will, in turn, improve the rate of capacity in which CDCR can appropriately double cell inmates.

Lastly, this Plan represents current day projections. Future events and circumstances, including, but not limited to, further economic downturns, an increase in crime, voter-approved changes to the criminal justice system, and other unanticipated events, may require changes to this Plan.

I.

LEGISLATIVE AND ADMINISTRATIVE REFORMS

A. PRE-CUSTODY REFORMS: California Community Corrections Performance Incentives Act of 2009

California typically sends about 19,000 probation violators to prison each year, representing approximately 40% of all new prison admissions from the courts.[2] Unfortunately, California's prior funding model encouraged this high rate of probation failure. According to a recent report by the Legislative Analyst's Office, California's funding model provided "an unintended incentive for local agencies to revoke probation failures to state prison instead of utilizing alternative community-based sanctions."[3] That same report recommended that California instead establish a fiscal incentive program for probation success so that California could reduce the number of probationers entering the state prison system by rewarding those probation departments that demonstrate success.

The recent passage of Senate Bill 18 (SB 18)[4] creates exactly such a system of rewards for probation success. It establishes the California Community Corrections Performance Incentives Act of 2009. The community corrections program created by this act will authorize counties to receive funding for implementing and expanding evidence-based programs for felony probationers. Counties will be required to track specific probation outcomes and, depending on the success of those outcomes, may be eligible for "probation failure reduction incentive payments" or "high performance grants."

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[2] "Achieving Better Outcomes For Adult Probation," Legislative Analyst's Office (May 29, 2009) at 20.
[3] *Id.* at 3.
[4] Sen. Bill No. 18 (2009 3d Ex. Sess.)

The new funding model created by SB 18 will provide sustainable funding for improved, evidence-based probation supervision practices. By incentivizing probation success, California will lower the number of probationers sent to prison each year.

State Defendants estimate this program will net an approximate 1,915 reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2010-2011.

B. IN-CUSTODY REFORMS: Credit Earning Enhancements

The passage of SB 18 also provides a number of credit earning enhancements. First, it provides one day of sentence credit for every day served in county jail from the time of sentencing. Current law provides one day of credit for every two days served in county jail. Second, it provides eligible inmates up to six weeks of credit per year for completion of approved programs. This approach to incentivizing good behavior for program completions has been suggested by several experts including the Expert Panel Report. Third, it provides that all parole violators returned to custody who are otherwise eligible should receive one day of credit for each day served. Currently, only some violators receive such credit. Fourth, it provides two days of credit for every one day served once the inmate is endorsed to transfer to a fire camp, rather than providing such credit only after the inmate actually participates in the camp. Finally, it provides a consistent rule of one day of credit for every day served for all eligible inmates, whether those inmates are on a waiting list for a full-time assignment, participating in college, or undergoing reception center processing, so long as the inmate is discipline-free during that time. Current law provides a similar credit structure, but does so through the existence, for example, of a "bridging program," whereby inmates in reception centers sign up for self-study programs and receive credit. This legislation makes credit earning consistent while obviating the need for a bridging program.

State Defendants estimate this program will net an approximate 4,556 reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2010-2011.

C. PAROLE REFORMS

1. "Summary Parole"

The enactment of SB 18 creates a new program of "summary parole" whereby CDCR is prohibited from returning to prison, placing a parole hold, or reporting to the Board of Parole Hearings, any parolee who meets all of the following conditions: (1) is not a sex offender[5]; (2) has not been committed to prison for a sexually violent offense[6]; (3) has no prior conviction for a sexually violent offense; (4) has no instant or prior convictions that are violent[7] or serious[8]; (5)

[5] California Penal Code, § 290, et seq. Subsequent references will be to the Penal Code unless otherwise noted.
[6] California Welfare and Institutions Code section 6600, subd. (b).
[7] § 667.5, subd. (c).

has not been found guilty of a serious disciplinary offense as defined by CDCR during his or her current term of imprisonment; (6) is not a validated prison gang member or associate, as defined in CDCR regulations; (7) has not refused to sign any written notification of parole requirements or conditions; and (8) has not been determined to pose a high risk to reoffend pursuant to a validated risk assessment tool.[9] All other offenders will be subject to traditional parole supervision upon release from prison.

The State Defendants anticipate that "summary parole" will reduce CDCR's institutional population because, when fully implemented, CDCR will be precluded from revoking parole and returning approximately 35,000 parolees to prison for parole violations.

Defendants estimate this program will net an approximate 4,180 reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2010-2011.

2. The Parole Violation Decision Making Instrument

SB 18 requires that CDCR employ a parole violation decision making instrument (PVDMI) to determine the most appropriate sanctions for parolees who violate conditions of parole. The instrument standardizes departmental decision-making by properly accounting for both the severity of the parole violation and the offender's risk to reoffend as determined by a validated risk assessment tool. This legislation comports with the recommendations of numerous expert reports, including the Rehabilitation Strike Team Report to the Governor, the California Expert Panel Report, and the Little Hoover Commission.

In fact, CDCR has already developed precisely such a tool and will have it fully deployed and in use throughout the State prior to the effective date of SB 18. CDCR's PVDMI receives risk information from the California Static Risk Assessment (CSRA), a validated risk assessment tool developed by CDCR in conjunction with the University of California, Irvine, Center of Evidence-Based Corrections. The CSRA predicts recidivism based on static demographic and criminal history information received from the California Department of Justice. The use of the PVDMI allows CDCR to preserve correctional resources by maximizing the use of alternative parole violation sanctions while reserving incarceration for only the most dangerous parolees for whom the scientific research dictates such a result. CDCR's pioneering work in both developing the CSRA and employing it as part of the CDCR's PVDMI has been recognized by the California Administrative Office of the Courts, which has asked CDCR to assist in the development of the Courts' own risk assessment tool.

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[8] § 1192.7, subd. (c).

[9] CDCR intends to employ the California Static Risk Assessment tool, a validated tool that predicts an offender's risk to reoffend on the basis of static information received from CDCR and the California Department of Justice.

Although CDCR will not identify a population reduction associated with this reform at this time, the PVDMI is an effective tool in placing parolees in the right programs and returning the high risk parole violators to prisons thereby increasing public safety while decreasing recidivism.

3. Reentry Courts

SB 18 also authorizes CDCR to collaborate with the California Administrative Office of the Courts to establish and expand drug and mental health reentry courts for parolees. These reentry courts will provide an option for parolees with drug and mental health needs to receive highly structured treatment in the community, under the close supervision of their parole agent and the court, rather than being returned to prison for violations that may be related to those needs. The legislation provides that for participating parolees, the court, with the assistance of the parolee's parole agent, "shall have exclusive authority to determine the appropriate conditions of parole, order rehabilitation and treatment services to be provided, determine appropriate incentives, order appropriate sanctions, lift parole holds, and hear and determine appropriate responses to alleged violations." The court proceedings will feature a dedicated calendar, non-adversarial proceedings, and a highly structured approach featuring frequent drug and alcohol testing to ensure the best chance of parole success.

The implementation of the reentry courts should have a significant impact on reducing the number of mentally ill inmates in CDCR because it should reduce the number of parolees with mental illness returning to prison.

State Defendants estimate this program will reduce CDCR's ADP by approximately 435 inmates once fully implemented in or about Fiscal Year 2010-2011.

D. ADMINISTRATIVE CHANGES

1. California's Out-of-State Correctional Facility Expansion

Defendants will expand the California Out-of-State Correctional Facility (COCF) program, which has as its primary purpose removing non-traditional beds and relieving crowding by transferring CDCR inmates to contracting out-of-state facilities. The COCF program has been in place since October 2006 and CDCR currently maintains approximately 8,000 inmates in out-of-state facilities. CDCR intends to expand the program to allow transfer of additional inmates out-of-state. CDCR maintains a robust quality assurance system over the program to ensure all inmates transferred out-of-state are able to obtain all appropriate services.

State Defendants estimate this program will net an additional approximate 1,250 reduction in CDCR's ADP in or about Fiscal Year 2009-2010, a 2,200 total reduction in CDCR's ADP in or about Fiscal Year 2010-2011, and a 2,500 total reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2011-2012.

2. Community Correctional Facilities Utilization

State Defendants intend to better utilize existing private Community Correctional Facilities (CCFs) to assist in the reduction of the prison population. CDCR established thirteen CCFs throughout California to house low-level inmates. CCFs prepare these inmates for their return to the community on parole. Robust oversight of the CCFs is already in place. However, CCFs have been underutilized by CDCR in the past, primarily because appropriate male inmates are also eligible for other types of housing, including minimum security facilities and camps. Yet, there is an abundance of female inmates who are eligible for placement into these facilities. Recognizing this, CDCR intends to increase its use of CCFs by converting three CCFs to female facilities.

State Defendants estimate this program will net an approximate 800 inmate reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2010-2011.

3. Commutations of Sentence

The Governor will review cases of certain deportable inmates under his discretionary constitutional clemency authority. A commutation of sentence would result in an inmate's early release from prison and deportation.

Defendants estimate this program will reduce CDCR's ADP by approximately 600 once fully implemented.

4. Discharge of Deported Parolees

Earlier this year CDCR implemented a new policy to discharge from parole the over 12,000 criminal aliens who have served their full state prison sentences and, upon release to parole, have been deported by the federal government. Previously, California had retained those criminal aliens on parole, even after their deportation. Under CDCR's new policy, those parolees have been discharged and additional parolees will be discharged from parole on an ongoing basis as CDCR receives confirmation of their deportation from the federal government. This new policy has resulted in fewer parolees being returned to state prison for parole violations and provides an incentive for federal prosecution of these offenders.

State Defendants estimate this policy will net an approximate 271 reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2010-2011.

5. Alternative Sanctions for Violations of Parole

CDCR will make greater use of electronic monitoring systems such as global positioning systems (GPS), for parole violators in lieu of revocation and re-incarceration. The expanded use

of GPS and other electronic monitoring systems will permit CDCR to monitor those offenders outside of state prison for parole violations.

State Defendants estimate this program will net an approximate 119 reduction in CDCR's ADP in or about Fiscal Year 2009-2010, a 891 reduction in CDCR's ADP in or about Fiscal Year 2010-2011, and a 1,000 reduction in CDCR's ADP once fully implemented in or about Fiscal Year 2011-2012.

II.

INCREASED CAPACITY

Assembly Bill 900 (AB 900) was passed by a bipartisan Legislature and signed into law by Governor Schwarzenegger on May 3, 2007. AB 900 allocates $7.6 billion, of which $6.4 billion is designed to reform CDCR by reducing prison overcrowding, increasing rehabilitation programs, and providing more beds for all inmates, including those requiring medical and mental health care. AB 900's comprehensive plan immediately relieved overcrowding by providing for additional out-of-state transfers, which are authorized to continue until July 1, 2011. AB 900 also provides for new rehabilitation programs and re-entry facilities to ease parolees' transition back into California communities, thereby reducing recidivism, relieving prison overcrowding, and ensuring public safety.

A. INFILL PROJECTS

Construction projects will result in new annex housing units and renovation of existing facilities. These projects will add bed capacity as well as additional office and treatment space to relieve operational pressures throughout CDCR institutions.

Newly constructed facilities are planned in stand-alone units and will operate semi-autonomously from the main institutions, though some space and/or functions, such as administrative services, may be shared by the main institutions to ensure the newly constructed facilities are fully serviced. Each newly constructed facility will have appropriate programming space and staffing for the population to be served.

Renovated facilities primarily represent current or former juvenile correctional facilities that are being repurposed to serve an adult male population. All renovated facilities will also provide for the reduction of nontraditional beds, and will have the requisite amount of programming space and staff for their intended populations. A description of each project follows by phase of

funding as outlined in AB 900.[10] There are a few projects that are not funded through the AB 900 appropriation and those projects are noted.

1. Kern Valley State Prison

This project will result in 930 new beds in a Level IV semi-autonomous facility at the existing Kern Valley State Prison site, with the addition of five housing units on 33 acres using the 270 design celled-bed prototype. This construction will include space for rehabilitative programming (i.e., vocational, academic, substance abuse), work opportunities, and a health services building of approximately 22,000 square feet. A portion of these beds will be wheelchair-compliant beds.

This project will be submitted to the Joint Legislative Budget Committee (JLBC) for its approval in Fall 2009 with a request for State Public Works Board (PWB) approval and interim financing from the Pooled Money Investment Board (PMIB) to immediately follow. Necessary environmental impact review (EIR) documents are already underway. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in or about Fiscal Year 2012-2013.

2. Heman G. Stark Conversion

This project renovates an existing 1,200-cell Department of Juvenile Justice facility in Chino. It includes the installation of design elements necessary to house an adult male population (i.e., lethal electrified fence, guard towers, etc.), ADA improvements, expanded or new administrative support buildings, and a new health services building. This plan provides for double-celling a portion of the facility and envisions approximately 1,800 beds**.** If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, 700 beds should come on line in or about Fiscal Year 2009-2010, and 1,100 beds in or about Fiscal Year 2010-2011.

3. Reception Center – Southern California

This project will result in 943 new beds in a cell-design semi-autonomous facility with five housing units, including the support space necessary to house reception center inmates. This project will also include a health services building to accommodate this population. Its location will be at one of the Southern California prisons where CDCR's need for additional reception center beds is greatest. A portion of these beds will be wheelchair-compliant beds.

The Reception Center Prototype initial planning is complete and siting options are underway. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in Fiscal Year 2012-2013.

[10] CDCR is currently pursuing legislation to redirect $1 billion from its infill funding appropriation under AB 900 to the healthcare funding appropriation. The figures set forth in this Plan assume (and require) passage of that legislation and that the proposed consolidated care center facility will be funded with the $1 billion in funds redirected from the infill appropriation.

4. Department of Juvenile Justice Conversion – Paso Robles

This project renovates a former juvenile justice facility located in Paso Robles. This facility currently includes both dorms and an existing 270-celled prototype. The intended capacity is approximately 899 beds which includes some double-celling of the population. This is intended for a general population facility with a health-care mission and will serve elderly inmates with healthcare needs. The scope of work would include a new lethal electrified fence to increase the security level of the facility from a Level 1 to a Level II, as well as building code updates, ADA improvements, and an expanded healthcare facility. A portion of these beds will be wheelchair-compliant beds.

This project will be submitted to the JLBC in Fall 2009 for approval and will subsequently be submitted to the State PWB and the PMIB for approval and financing. The EIR document is already underway. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in Fiscal Year 2011-2012.

5. Wasco State Prison – Level IV Celled Facility

This project builds a 1,896 bed Level IV semi-autonomous celled facility based on CDCR's 180-design prototype. This project includes eight housing units, support and programming space planned for available land located on the unused land at the existing prison in Wasco. This project will also include a Correctional Treatment Clinic (CTC) to serve the population and a portion of the overall beds will be wheelchair-compliant.

This project is currently proposed for funding in Phase 2 of AB 900. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in Fiscal Year 2012-2013.

6. Department of Juvenile Justice Conversion – Northern California

This project renovates a former juvenile justice facility located in Northern California at a site to be determined. The intended capacity is approximately 1,133 beds which includes some double-celling of the population. The facility is intended for a general population facility with a health care mission and will serve inmates with medical outpatient needs and inmates requiring Enhanced Outpatient Program mental health services. CDCR is consulting with the *Plata* Receiver to identify an appropriate site and the appropriate scope for the project.

This project is currently proposed for funding in Phase 2 of AB 900. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in Fiscal Year 2013-2014.

B. HEALTHCARE PROJECTS

The healthcare projects described below include renovation and expansion of existing facilities to add housing, office, and/or treatment space to further meet the healthcare needs of CDCR's adult inmates at its existing prisons. Several of these projects are being constructed pursuant to specific court orders. Also, many of these projects are being planned in consultation with the *Plata* Receiver.

1. Northern Consolidated Care Facility

This project provides for a large healthcare facility serving a medical and mental health population to include specialized housing, treatment, and support space at a location in Northern California to be selected among several sites that have already been identified and for which environmental documents are underway. This facility would provide approximately 1,702 new beds serving high acuity medical and mental health patients. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in or about Fiscal Year 2011-2012.

2. San Quentin State Prison – Correctional Treatment Center (Building 22)

This project is a renovation and replacement of the existing infirmary at San Quentin State Prison and will include a Correctional Treatment Center providing 41 medical and mental health beds. Assuming no obstacles arise, anticipated completion is in or about January 2010.

3. California Men's Colony – Mental Health Crisis Beds

This project builds a 50-bed mental health crisis facility on available land at the California Men's Colony in San Luis Obispo. This project scope and schedule are being coordinated with the Special Master in the *Coleman* case. Assuming no obstacles arise, anticipated completion is in or about October 2012.

4. California State Prison, Lancaster – Enhanced Outpatient Program

This project builds additional treatment and office space to increase by 150 the number of Enhanced Outpatient Program mental health inmate patients served at California State Prison, Lancaster. This project's scope and schedule are being coordinated with the Special Master in the *Coleman* case. Assuming no obstacles arise, anticipated completion is in or about September 2012.

5. California Medical Facility – Intermediate Care Facility

This project builds a 64-bed Intermediate Care Facility to serve mental health patients on the grounds of the California Medical Facility. This project scope and schedule are being coordinated with the Special Master in the *Coleman* case. Assuming no obstacles arise, anticipated completion is in or about November 2012.

6. California Medical Facility – Enhanced Outpatient Program

This project builds office and treatment space to serve 658 Enhanced Outpatient Program mental health inmate patients on the grounds of the California Medical Facility. This project's scope and schedule are being coordinated with the Special Master in the *Coleman* case. Assuming no obstacles arise, anticipated completion is in or about April 2013.

7. California State Prison, Sacramento – Enhanced Outpatient Program

This project builds office and treatment space to serve 192 Enhanced Outpatient Program mental health inmate patients on the grounds of California State Prison, Sacramento. This project scope and schedule are being coordinated with the Special Master in the *Coleman* case. This project is not funded through AB 900. Assuming no obstacles arise, anticipated completion is in or about November 2011.

8. San Quentin State Prison – Condemned Inmate Complex Correctional Treatment Center

This project builds 1,152 beds in a new Condemned Inmate Complex on the grounds of San Quentin. This project will include a Correctional Treatment Center serving the medical and mental health needs of the inmate population. CDCR will submit this project for funding in Fall of 2009 and expects to award contracts and break ground in March 2010. This project is not funded through AB 900. Assuming no obstacles arise, anticipated completion is in or about Fiscal Year 2011-2012.

9. Salinas Valley State Prison – Enhanced Outpatient Program

This project intends to add office and treatment space to serve 96 Enhanced Outpatient Program mental health inmate patients on the grounds of Salinas Valley State Prison. This project's scope and schedule are being coordinated with the Special Master in the *Coleman* case. This project is not funded through AB 900. Assuming no obstacles arise, anticipated completion is in or about April 2013.

10. California Institute for Women – Psychiatric Services Unit

This project intends to renovate existing housing at the California Institute for Women in Chino to provide housing and treatment for a 20-bed Psychiatric Services Unit serving the mentally ill offender population. This project scope and schedule are being coordinated with the Special Master in the *Coleman* case. This project is not funded through AB 900. Assuming no obstacles arise, anticipated completion is in or about February 2011.

11. California State Prison, Sacramento – Psychiatric Services Unit

This project provides office and treatment space to serve 152 Psychiatric Services Unit mental health inmate patients on the grounds of the California State Prison, Sacramento. This project scope and schedule are part of the construction projects proposed in the *Coleman* case.

12. Salinas Valley State Prison – Enhanced Outpatient Program Administrative Segregation Unit

This project was originally planned to add both housing and treatment space to serve approximately 72 Enhanced Outpatient Program mental health inmate patients in the administrative segregation unit at Salinas Valley State Prison. The scope of the project as developed by CDCR has been denied by the Joint Legislative Budget Committee, which directed CDCR to develop an alternative that would provide only office and treatment space for that population. CDCR is currently exploring alternate options to comport with this direction. CDCR will seek relief from the *Coleman* court to modify the project as appropriate.

13. California State Prison, Corcoran – Enhanced Outpatient Program

This project will add office and treatment space to serve an additional 45 Enhanced Outpatient Program mental health inmate patients on the grounds of California State Prison, Corcoran. This project's scope and schedule are being coordinated with the Special Master in the *Coleman* case.

14. Southern California Crisis Beds

This project will site a new 50-bed crisis facility at either the Heman Stark facility in Chino or another Southern California prison. These beds were to be located initially at the Consolidated Care Facility. However, given the need to add additional crisis beds in Southern California, this project is now a stand-alone unit. State Defendants intend to consult with the Special Master in the *Coleman* case. If requisite approvals are obtained, there are no legal challenges, and there are no construction delays, these beds should come on line in or about Fiscal Year 2012-2013.

15. California Institute for Women – 45 Bed Intermediate Care Facility

This project will build a new 45-bed intermediate care facility at the California Institute for Women to serve the mental health population for female adults in the custody of CDCR. Preliminary plans are complete with this project and it is currently in the working drawings phase, with construction to be funded by AB 900 funds. This project's scope and schedule are being coordinated with the Special Master in the *Coleman* case. State Defendants are currently evaluating their long-term need for this project.

C. REENTRY PROJECTS

Pursuant to AB 900, reentry projects provide for the design and operation of secure community reentry facilities located in communities throughout the state. These facilities will hold a maximum of 500 inmates who are within 6-12 months of being released. These facilities will be autonomous facilities and have been designed to facilitate an intensive rehabilitative programming environment and include healthcare treatment space for the population to be served.

To date, eleven counties have agreed to locate a reentry facility to serve their population. The first reentry facilities are being planned in the counties of Kern, Madera, San Joaquin (to also serve Amador and Calaveras), San Luis Obispo (to also serve Santa Barbara and San Benito), and San Bernardino. A reentry facility planned for San Diego is currently being sited. Additional counties have expressed interest in supporting reentry facilities in their communities.

Assuming no obstacles arise, Defendants estimate this program will build approximately 500 beds in or about Fiscal Year 2010-2011, 2,500 additional beds in or about Fiscal Year 2012-2013, 2,500 additional beds in or about Fiscal Year 2013-2014, and 2,500 additional beds in or about Fiscal Year 2014-2015.

California Department of Corrections and Rehabilitation

Population Management Plan: Table I

Fiscal Year	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15
Spring Population Projections[1]	**167,985**	**172,232**	**172,205**	**174,003**	**175,177**	**177,317**	**178,915**
Institution Population Reduction Measures							
Probation Reform							
Community Corrections		479	1,915	1,915	1,915	1,915	1,915
Sentencing Reform							
Enhanced Credit Earning		660	4,180	4,180	4,180	4,180	4,180
Executive Authority							
Expansion of Out-Of-State Placements[2]		1,250	2,200	2,500	2,500	2,500	2,500
Expanded Utilization of Private Prisons		400	800	800	800	800	800
ICE Commutations		300	600	600	600	600	600
Parole Reform							
Summary Parole		966	4,556	4,556	4,556	4,556	4,556
Discharge of Deported Parolees		279	271	271	271	271	271
Alternative Parole Sanctions		119	891	1,000	1,000	1,000	1,000
Parole Reentry Courts		50	435	435	435	435	435
New Construction[3]							
DJJ Renovations		700	1,800	2,700	2,700	3,800	3,800
Reentry			500	500	3,000	5,500	8,000
Infill		64	64	704	6,850	6,850	6,850
Total Population Reduction		**5,267**	**18,212**	**20,161**	**28,807**	**32,407**	**34,907**
Institution Population[4]	**150,655**	**149,635**	**132,416**	**132,292**	**123,022**	**120,388**	**117,346**
Institution Crowding Rate	**189%**	**188%**	**166%**	**166%**	**155%**	**151%**	**147%**

The population in FY 08/09 is based on the actual population count on July 1, 2009. The projections in FY 09/10 and thereafter assume the transfer of any backlogged inmates into state custody.

[2] Assumes cooperation from *Plata*, *Coleman*, *Perez*, and *Armstrong* courts.

[3] The beds identified on this table reflect the actual capacity for which they are being built. The double celling rate of these facilities vary by project. However, whatever the double celling rate, the beds or projects are being designed with an appropriate amount of program and clinical space to accommodate that number of inmates.

[4] Excludes inmates in camps, private facilities and out-of-state facilities.

III.

ADDITIONAL LEGISLATIVE REFORMS

This Administration has demonstrated its willingness to reform the State's prisons, and the Administration will continue to push for meaningful reforms like the reforms adopted in SB 18. The following reforms, however, cannot be accomplished administratively, and they will require legislative changes.[11]

A. ADDITIONAL CALIFORNIA OUT-OF-STATE CORRECTIONAL FACILITY EXPANSION

In addition to the 2,500 bed expansion set forth above, State Defendants will work with the Legislature to remove the existing clause that calls for the termination of the COCF program in 2011. With this legislative change, State Defendants estimate they will be able to expand the COCF program by an additional 5,000 inmates reducing its ADP by that amount.

B. PROPERTY CRIME THRESHOLDS

Numerous property crimes in California are punishable alternatively as a misdemeanor or a felony, depending on the dollar amount of the taking. For example, grand theft is punishable as a felony when the amount stolen exceeds $400, but is punishable as a misdemeanor when the amount stolen is $400 or less. In most cases, the threshold for these wobblers (crimes that may be prosecuted as either misdemeanors or felonies) was established over 20 years ago. As time has passed and inflation risen, increasing numbers of these wobblers have become prosecutable as felonies, thereby resulting in greater numbers of offenders eligible for prison sentences rather than jail sentences.

For thirty-nine of these property crimes, SB 18 increased the dollar threshold to present-day values. For example, property crimes where the threshold was set at $400 were increased to $950. The aim was to expose lesser number of offenders to felony prosecution and prison terms and thereby reduce the prison population. However, Senate Bill 18 left the threshold for grand

[11] The Court's August 4, 2009 order stated, "[s]hould any of defendants' proposed population reduction measures require the waiver of any provisions of state law, the state shall so advise the court, and shall explain why the requested waiver is permissible under 18 U.S.C. § 3626(a)(1)(b)." This Court did not permit Defendants to introduce evidence regarding whether there are any current and ongoing violations of federal rights. Plaintiffs were also not required to prove, nor did they prove, that there are any current and ongoing violations. Thus, the State Defendants do not assert that state law waivers are permissible here, because State Defendants believe that the statutory requirements authorizing such waivers have not been satisfied. Furthermore, because the recent improvements to healthcare and the plans set forth throughout this submission provide a form of relief correcting alleged federal violations, the State Defendants do not seek the waiver of any State law under the PLRA (*see* 18 U.S.C. s 3626(a)(1)(B)(ii)-(iii)).

theft itself unchanged, an omission that does not capture the impact of that offense, and also undermines the effect of having changed many other property crimes because they could alternatively be charged as grand theft. The State Defendants seek legislation to increase the threshold of grand theft to $950. If fully implemented, Defendants estimate this program will net an approximately 2,700 reduction in CDCR's ADP.

C. ALTERNATIVE CUSTODY PROGRAM

The Administration will seek legislation to establish a program of alternative custody options for lower-risk offenders. Certain offenders would be eligible to serve the last 12 months of their sentence under house arrest with GPS monitoring. House arrest may include placement in a residence, local program, hospital, or treatment center. Eligible inmates include inmates with 12 months or less remaining to serve, elderly inmates, and medically infirm inmates. Inmates are ineligible for alternative custody if they have a current or prior conviction for a violent offense, are required to register as a sex offender, have a history of escape, or pose a high risk to reoffend pursuant to the California Static Risk Assessment. If fully implemented, Defendants estimate this program will net an approximately 4,800 reduction in CDCR's ADP.

D. SENTENCING COMMISSION

The Administration will seek legislation creating a permanent, independent sentencing commission that would set sentencing guidelines each year. The guidelines would later go into effect unless rejected by the Legislature and the Governor. The Commission would be a regulatory and research body housed within the Administrative Office of the Courts that would review the entire California Code in light of empirical statewide sentencing data, recidivism rates, risk assessments, and population projections, to accurately forecast public safety impacts and correctional costs for all sentencing proposals. The commission would create coherent and equitable sentence guidelines that rest explicitly on the goal of coordinating sentences with available correctional resources. Many states have sentencing commissions and most experts recommend establishment of sentencing commissions.

Under the Administration's proposal, a sentencing commission would consist of thirteen voting members, subject to staggered 3-year terms, including a balance of law enforcement officials, judges, researchers, and defense lawyers. The Commission would present the Legislature and the Governor with a set of sentencing and parole rules, along with recommended statutory changes, by 2013. The Commission would thereafter publish reports on its sentencing research. In the event any court orders a reduction in inmate population, the Commission would develop recommendations for court compliance.

E. AB 900 CONSTRUCTION ACCELERATION

CDCR has collaborated with the *Plata* Receiver in his part as construction coordinator to develop CDCR's plan for healthcare beds, and has drafted legislation to enable CDCR to accelerate all of its construction authorized under AB 900 using alternative delivery methods. If the Legislature authorizes these amendments, CDCR would be able to expedite the construction of new capacity, including new healthcare facilities, and the construction of treatment and other support spaces to meet the needs of the class members.

California Department of Corrections and Rehabilitation

Population Management Plan: Table II

Fiscal Year	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15
Spring Population Projections[1]	**167,985**	**172,232**	**172,205**	**174,003**	**175,177**	**177,317**	**178,915**
Institution Population Reduction Measures							
Probation Reform							
Community Corrections		479	1,915	1,915	1,915	1,915	1,915
Sentencing Reform							
Enhanced Credit Earning		660	4,180	4,180	4,180	4,180	4,180
Property Crime Thresholds			2,700	2,700	2,700	2,700	2,700
Alternative Custody			2,400	4,800	4,800	4,800	4,800
Executive Authority							
Expansion of Out-Of-State Placements[2]		1,250	2,200	7,500	7,500	7,500	7,500
Expanded Utilization of Private Prisons		400	800	800	800	800	800
ICE Commutations		300	600	600	600	600	600
Parole Reform							
Summary Parole		966	4,556	4,556	4,556	4,556	4,556
Discharge of Deported Parolees		279	271	271	271	271	271
Alternative Parole Sanctions		119	891	1,000	1,000	1,000	1,000
Parole Reentry Courts		50	435	435	435	435	435
New Construction[3]							
DJJ Renovations		700	1,800	2,700	2,700	3,800	3,800
Reentry			500	500	3,000	5,500	8,000
Infill		64	64	704	6,850	6,850	6,850
Total Population Reduction		**5,267**	**23,312**	**32,661**	**41,307**	**44,907**	**47,407**
Institution Population[4]	**150,655**	**149,635**	**127,316**	**119,792**	**110,522**	**107,888**	**104,846**
Institution Crowding Rate	**189%**	**188%**	**160%**	**151%**	**139%**	**136%**	**132%**

[1] The population in FY 08/09 is based on the actual population count on July 1, 2009. The projections in FY 09/10 and thereafter assume the transfer of any backlogged inmates into state custody.
[2] Assumes cooperation from *Plata*, *Coleman*, *Perez*, and *Armstrong* courts.
[3] The beds identified on this table reflect the actual capacity for which they are being built. The double celling rate of these facilities vary by project. However, whatever the double celling rate, the beds or projects are being designed with an appropriate amount of program and clinical space to accommodate that number of inmates.
[4] Excludes inmates in camps, private facilities and out-of-state facilities.

IV.

CONCLUSION

As required by the August 4, 2009 order, but without waiving its appellate rights, the State Defendants submit this Plan to reduce the State's prison population through smart reforms that do not compromise public safety.

EXHIBIT B

California Department of Corrections and Rehabilitation
Achievements & Improvements Introduced During Three-Judge Court Proceeding

During the course of the Three-Judge Court proceeding, Defendants introduced the following evidence detailing the California Department of Corrections and Rehabilitation's (CDCR) achievements and improvements. Those include:

I. Improvements in the Delivery of Medical Care

A. Funding:

1. In FY 1994-95, $344 million was expended for inmate health care or $2,714 per inmate per year (in 1994 dollars). (Trial Aff. of Todd Jerue, 10/30/08, (Jerue Aff.) *Plata v. Schwarzenegger* Dock. No. 1632 at ¶ 6.).

2. In FY 2005-06, $1.252 billion was expended for inmate health care or $7,601 per inmate per year (in 2005 dollars). (*Id.* at ¶ 7.)

3. In FY 2006-07, $1.635 billion was expended for inmate health care or $9,759 per inmate per year (in 2006 dollars). (*Id.*at ¶ 8; Trial Transcript (Trial Tr.), 12/3/08, at 1210:4-13; 1213:17-22; 1215:20-1216:20.)

4. In FY 2007-08, $2.249 billion was expended for inmate health care or $13,778 per inmate per year (in 2007 dollars). (*Id.* at ¶ 9.)

B. Improvements in Death Review and Death Review Programs:

1. The number of alleged preventable asthma deaths went from 6 in 2006 to 0 in 2007. (Trial Tr., 11/20/08, at 450:20-451:2.)

2. The number of alleged preventable deaths went from 18 in 2006 to 3 in 2007. (*Id.* at 486:16-22; 487:2-5; 12/10/07 Deposition of Ronald Shansky (Shansky Dep.) at 74:7:16.)

3. Deaths have trended down in the last 10 quarters. (Trial Tr., 11/20/08, at 454:21-455:12.)

C. Staffing Increases:

1. Physicians: CDCR's physician staffing has increased dramatically, and is within 5% of the Receiver's goal to fill 90% of physician positions. (Trial Tr., 11/20/08, at 445:7-446:14; 447:9-448:5.) Between November 2007 and August 2008, CDCR hired 62 full-time state employed primary care physicians. (Defendants' Trial Exhibit (Defs.' Tr. Ex.) 1235 – Staffing Progress for Medical and Mental Health at 3.)

2. Chief Physicians and Surgeons: Between October 2005 and August 2008, the number of full-time state employed Chief Physicians and Surgeons rose from 10 to 28. (*Id.* at 2.)

3. Physician Assistants: The number of Physician Assistants rose from 1 in April 2006 to 13 in August 2008. (*Id.* at 4.)

4. Nurse Practitioners: The number of Nurse Practitioners rose from 11 in October 2005 to 44 in August 2008. (*Id.* at 5.)

5. Registered Nurses: The number of registered nurses rose from 818 in October 2005 to 1556 in August 2008. Staffing of registered nurses has increased and is now within 2% of the Receiver's statewide goal to fill 90% of nursing positions. (Trial Tr., 11/20/08, at 445:7-446:14; 447:9-448:5.)

6. Licensed Vocational Nurses: The number of licensed vocational nurses rose from 4 in May 2007 to 937 in August 2008. (Defs.' Tr. Ex. 1235 at 7.)

7. Correctional Officers: The number of correctional officers employed by the department rose from 20,741 in October 2005 to more than 24,090 in August 2008. (*Id.* at 8.)

D. During the *Plata v. Schwarzenegger* Receivership, other improvements include:

1. New screening and assessment processes at reception and release;

2. New health care access units -- that include large numbers of correctional officers charged with ensuring inmate access to medical care;

3. Establishing new and better health care scheduling and patient-inmate tracking systems;

4. Redesigning and improving sick call processes, forms, and staffing models;

5. Improved chronic care systems;

6. Improved emergency response plans and systems;

7. Improved provision of and access to specialty care and hospital services;

8. Improved medical clinical leadership and management;

9. Improved peer review and death review programs;

10. Establishment of a comprehensive, safe, and efficient pharmacy program -- including continued development of the drug formulary and the rollout of a

computerized pharmacy operating system designed to improve medication management in CDCR institutions;

11. Establishing standardized health records practices -- ultimately leading to the use of electronic medical records; and

12. Establishing effective radiology and laboratory services.

(Defs.' Tr. Ex. 1100 – Receiver's Ninth Quarterly Report, 09/15/08, *Plata* Dock. No. 1472 at 8-12, 15-24, 33-34, 40-41, 51-58.)

II. Improvements in the Mental Health Care Delivery System

A. Enhanced Screening, Diagnosis, and Treatment Procedures

1. Since 1997, Defendants have used a uniform set of policies and procedures to provide care to mentally ill inmates. (Trial Aff. of Robin Dezember, 10/30/08, (Dezember Aff.) *Plata v. Schwarzenegger* Dock. No. 1715 at ¶ 15.)

2. CDCR now identifies and classifies a significantly greater proportion of its inmates as belonging to the *Coleman* class than it did when the *Coleman* litigation began. In August 2008, CDCR classified 20% of its inmates as severely mentally ill, up from 7.9% in 1994. (*Id.* at ¶¶ 70, 71.)

3. The treatment programs or 'levels of care' provided by Defendants have increased in size and in specificity. Under the Revised Program Guide, Defendants now provide distinct levels of care and programs reflecting the mental health care and housing needs of *Coleman* class members. (Defs'. Trial Ex. 1273—*Coleman* F&Rs, 6/6/94 at 43-44; *see also* Dezember Aff., ¶ 70.)

B. Mental Health Bed Increases

1. In 1994, the CDCR mental health care system was limited to a few institutions and involved some 3,200 designated mental health care beds. (Defs.' Trial Ex. 1273 - *Coleman* F&Rs, 6/6/94, at 43-44; Dezember Aff., ¶ 70.) Now, the CDCR mental health care system extends to each CDCR institution across the State and involves some 30,382 beds across all levels of care. (Dezember Aff., ¶ 75; Defs.' Trial Ex. 1247 - Chart of CDCR Facilities.)

2. There are now three state mental hospitals and two psychiatric programs available for inpatient care. (Trial Tr., 11/21/08, at 758:13-22; 759:9-760: 5.) These facilities include Atascadero, Coalinga, and Patton State Hospitals and psychiatric programs at CDCR's California Medical Facility and Salinas Valley State Prison institutions. (Trial. Aff. of Cynthia Radavsky, 10/30/08 (Radavsky Aff.) *Plata v. Schwarzenegger* Dock. No. 1657 at ¶ 14; Trial Tr., 11/21/08, at 758:13-22, 759:9-760:5.)

3. Defendants have systematically added mental health beds at individual institutions, with a resulting decrease in wait lists for mental health beds. For instance, the activation of 64 Psychiatric Services Unit beds in 2008 resulted in a decrease in the waiting list from 79 to 22. Likewise, the activation of 50 Mental Health Crisis beds in 2008 contributed to a decrease in the waiting list for such beds from 301 to 16. Kern Valley State Prison recently added 96 sensitive need Enhanced Outpatient Program (EOP) beds, which allowed EOP patients to be moved from administrative segregation to those beds. (Dezember Aff., ¶ 74; Defs.' Trial Ex. 1186 - Kern Valley State Prison Activation Mem., Aug. 2008.)

C. Mental Health Staffing Increases

1. CDCR has increased its number of mental health clinicians, including psychiatrists, psychologists, and social workers, from 314 positions in 1994 to 2396 positions in 2008. (Dezember Aff. ¶ 48; *see* Defs.' Ex. 1269 - Chart of 1994 Mental Health Care Positions; Defs.' Trial Ex. 1235 - CDCR 2008 Mental Health Care Positions; Defs.' Trial Ex. 1246, CDCR Chart of Mental Health Positions.)

2. Both CDCR and the Department of Mental Health (DMH) have used new pay parity packages to drive stronger recruiting strategies for mental health clinical staff. (Dezember Aff., ¶¶ 57, 58; Radavsky Aff., ¶ 28; Trial Tr., 11/21/08 at 812:11-813:13.)

3. CDCR now employs approximately 2400 correctional officers in dedicated "access to care" units to provide escort for inmates to their medical and mental health appointments. (Trial Tr., 12/10/08, at 1894:20-1895:6.)

D. Suicide Prevention Program Improvements

1. At the underlying trial, the *Coleman* court found that Defendants' 1990 suicide prevention program for CDCR institutions would have been sufficient if adequately staffed. (Dezember Aff. ¶ 30; Defs.' Trial Ex. 1273 - *Coleman* F & R, 6/6/94, *Coleman* Dock. No. 547 at 75:1-6.) Defendants have significantly increased mental health staffing since the underlying trial. (Dezember Aff., ¶ 48; *see* Defs.' Trial Ex. 1269 - Chart of 1994 Mental Health Care Positions; Defs.' Trial Ex. 1235.)

2. The *Coleman* court found in 2005 that suicides occurred at higher rates within administrative segregation areas. CDCR worked with the *Coleman* Special Master and Plaintiffs' counsel to develop improved suicide prevention strategies for administrative segregation areas. The *Coleman* court approved and Defendants have implemented a multidisciplinary and comprehensive approach to reducing suicides. (Dezember Aff., ¶¶ 32-41; *see* Defs.' Trial Ex. 1279 - *Coleman* Order, 6/9/05, *Coleman* Dock. No. 1668; Defs.' Trial Ex. 1280 - *Coleman* Stipulated Order, 2/13/06, *Coleman* Dock. No. 1760; Defs.' Trial Ex.

1282 -*Coleman* Order, 6/8/06, *Coleman* Dock. No. 1830; Defs.' Trial Ex. 1311 - *Coleman* Stipulated Order, 7/5/06, *Coleman* Dock. No. 1872.)

3. The performance and efficacy of these suicide prevention programs is measured by CDCR's internal investigations and analyses of any inmate suicides within its institutions. (Dezember Aff. ¶¶ 35-36.)

E. Mental Health Records System - Defendants are continuing to work to improve CDCR's mental health recordkeeping systems. According to current estimates, new information technology will be implemented within 18-24 months. (Dezember Aff. ¶¶ 90-91.)

F. Pharmacy System - The Coordinated Courts vested the *Plata* Receiver with leadership responsibility over the pharmacy function of the medical and mental health services delivery system. (Defs.' Trial Ex. 1299, Coordinated Cts' Order, 6/28/07.) The *Plata* Receiver has contracted with Maxor National Pharmacy Services Corporation to install the necessary pharmacy services in each institution. (*Id.*)

III. CDCR Inmate Mortality Rates

A. CDCR had the 14th best mortality rate nationally. (Trial Tr., 11/19/08, at 244:7-27.)

B. From 2001 to 2004, the average annual mortality rate for all illnesses per 100,000 state prisoners was 223 nationwide, 181 for States in the west region, and 170 for California. Thirty-six states had higher mortality rates than California during this period. (Trial Tr., 12/3/08, at 1271:9-1272:21.)

IV. Relevant California Criminal Justice Statistics

A. California does not incarcerate felons at an unusually high rate. Currently, California sends fewer than 20% of convicted felons to prison - the national average is 40%. (Trial Aff. of Mathew Cate, 10/30/08, (Cate Aff.,), *Plata* Dock. No. 1717 at ¶¶ 23-24.) California's incarceration rate - the number of prison inmates per state residents – is only slightly above the national average. California's incarceration rate is about 470 per 100,000. The national average is 445 per 100,000. (Cate Aff. ¶ 22, Defs.' Tr. Ex. 1257 – Prisoners in 2006 Bulletin, Appendix Table No. 6.)

B. California does not keep people in prison longer than average. The average prison sentence imposed in California is 47.2 months and the average amount of time served is 23.9 months. (Cate Aff. ¶ 25.) The average prison sentence imposed nationwide for all state courts is 57 months and the average amount of time served is 32 months. (*Id.*; Defs.' Trial Ex. 1221 – State Court Sentencing of Convicted Felons 2004 – Statistical Tables.)

C. The increase in the prison population from 1997 to 2007 is almost exclusively made up of an increase in the number of inmates convicted of crimes against persons. (Cate

Aff. ¶ 18.) There has been a decrease in the number of drug offenders in California's prisons in the same 10 year period - from 41,459 to 33,738. (Cate Aff. ¶ 18.)

EXHIBIT B

RECOMMENDATIONS FOR COCCIDIOIDOMYCOSIS MITIGATION IN PRISONS IN THE HYPERENDEMIC AREAS OF CALIFORNIA

Recommendations for Coccidioidomycosis Mitigation in Prisons in the Hyperendemic Areas of California

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June 2007

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We would like to express our sincere appreciation to the following contributors for providing their scientific evidence and professional opinion that has helped form the basis for our recommendations about how to mitigate the impact of Coccidioidomycosis in California Correctional Institutions.

California Department of Health Services

Division of Communicable Disease Control

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Local County Health Officers

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Recommendations for Coccidioidomycosis Mitigation in Prisons in the Hyperendemic Areas of California

Executive Summary

This report builds on the information previously provided to the Receiver in the May 21, 2007 memorandum entitled *Prevention and Treatment of Coccidioidomycosis at Pleasant Valley State Prison – Background and Status Report*. This report summarizes the findings from the May 24th *2007 Valley Fever Symposium* held in Bakersfield by the Kern County Health Department and includes additional recommendations for interventions that will help mitigate risk to patients. At the Symposium, representatives from the CDHS and seven County Health Officers[1] from within the hyperendemic area reported a significant increase in the rate of Cocci in their respective counties over the past several years.

On May 3, 2007, Assembly Bill 900 was chaptered. It authorized the California Department of Corrections and Rehabilitation (CDCR) to design, construct, or renovate prison housing units, prison support buildings, and programming space in order to add 7, 484 beds.[2] Four of the ten prisons identified for expanded construction are in the Coccidioidomycosis (CM) hyperendemic area and include Pleasant Valley State Prison in Fresno County and Kern Valley State Prison, Wasco State Prison, and North Kern State Prison in Kings County. The Administration at CDCR has made reducing prison overcrowding a priority and is already planning an aggressive effort to implement the requirements of this statute.

In consultation with the California Department of Health Services (CDHS), the Division of Correctional Health Care Services has implemented several actions designed to reduce inmate and staff exposure to CM and mitigate its harmful effects. The statutory decision to construct additional prison beds the hyperendemic area creates some urgency in evaluating the current effort and making additional recommendations.

Consensus Recommendations from CDHS, Local County Health Officers, Academic Coccidioidomycosis Experts, and CDCR Medical Care and Public Health Consultants

After this important meeting, extensive discussion ensued to develop recommendations and a plan of action to reduce exposure to at risk inmates and staff and improve outcomes for those who develop Coccidioidomycosis while in the correctional setting.

Key Recommendations from the Local County Health Officers

At the end of the Symposium, the Health Officers made the following recommendations to health professionals within the CDCR:

1. Proceed with environmental mitigation in the prisons through landscaping with ground cover, and placing concrete and other dust reducing materials on the grounds;
2. Continue the diversion and relocation of inmates at high risk for CM:
3. Reinstate the public health system in prisons;
4. Notify the local Health Departments of new cases identified by prison providers;
5. Expand epidemiologic research around CM;
6. Support vaccine research; and
7. Do not expand prison beds in the hyperendemic area, especially at PVSP.

---

[1] The seven Health Officers were: B. A. Jinadu, MD – Kern County, Michael MacLean, MD – Kings County, Ed Moreno, MD – Fresno County, Robert Levin, MD – Ventura County, Karen Haught, MD – Tulare County, Karen Furst, MD – San Joaquin County, and Greg Thomas, MD – San Luis Obispo County

[2] The bill also permits CDCR to acquire land, design construct, and renovate reentry program facilities and to construct and establish new buildings at facilities under the jurisdiction of the department to provide medical, dental, and mental health treatment housing for 6,000, as specified.

Key Recommendations from the CDCR Medical Care and Public Health Consultants

Immediate

1. Implement environmental mitigation techniques at PVSP based upon the best available data; both indoors and outdoors.
2. Consider providing the same outdoor mitigation to Avenal, Corcoran and SATF after determining if the incidence of CM in these prisons warrants this effort.
3. Defer any new construction that will lead to additional prisoners being housed in the hyperendemic area.
   a. Provide indoor recreation area for inmates to use during high wind/dust events;
   b. Any retrofitting must be done using dust mitigating construction methods.
4. Continue to exclude all of the following inmates from being housed in a facility that is in the hyperendemic area[3] including: HIV infected with a T-cell count less than 250, history of lymphoma; status post solid organ transplant; chronic immuno therapy (e.g. severe rheumatoid arthritis); chronic lung disease requiring oxygen therapy; and cancer inmate-patient on chemotherapy.
5. A request has been sent to Dr. Gil Chavez, Deputy Director of the CDHS Division of Preventive Health to ask Dr. Jean Yuan, from CDHS, to return and perform an analysis of the Coccidioidomycosis cases that have been diagnosed in the first quarter of 2007 to see if any new at-risk groups can be identified.
6. Continue to partner with Local Health Officers, CDHS, and subject matter experts on this issue.

Near Future

1. Expand the exclusion criteria to include all inmates who are HIV infected and have moderate and severe Chronic Obstructive Pulmonary Disease.
2. Perform a re-analysis of all new cases to determine the results of prior mitigation efforts.
3. Implement additional control measures as determined by results of ongoing analysis.
4. Provide additional education to all CDCR employees working and/or living in the hyperendemic area.
5. Support the development of a vaccine effective against CM.
6. Have all CM lab specimens sent to either Kern County PH Laboratory or the UC Davis Coccidioidomycosis Serology Laboratory for analysis; provide clinical information to the lab.
7. Establish a Coccidioidomycosis Working Group, including CDCR public health/communicable disease specialists and representatives from the Division of Communicable Disease Control and the Environmental Health Investigation Branch at CDHS, UCSF (Dr. Rutherford – Vaccine Project), and UC Davis Coccidioidomycosis Serology Laboratory (Dr. Pappagianis), and the Local Health Officers from the hyperendemic area to design, develop, implement and evaluate a comprehensive program to contain and reduce the rate of Cocci in inmates and staff at the CDCR.
8. Collaborate with the CDPH and Cal EPA to establish a measure for dust pollution in the air that can be used to indicate when staying indoors or wearing a mask while outdoors is recommended – similar to the air index used to warn those with vulnerable conditions to stay in on high smog pollution days.
9. Collaborate with Cal OSHA and CDPH in identifying staff issues and their mitigation for the hyperendemic area – include unions in this discussion.

Long term goal

1. Work toward the goal of not housing or employing any non-immune individuals in the hyperendemic area. This may depend upon technology that is not yet readily available, including immunization and/or reliable methodologies to determine who has previously been infected.
2. As part of future planning for centralized dialysis services, all dialysis patients will be located outside of the hyperendemic area. Patients will be moved once it can be done safely.
3. Based on the best scientific evidence, determine a minimum acceptable rate of Coccidioidomycosis (e. g. a rate equal to or less than the local community) for prisons in the hyperendemic area.
4. Evaluate the effort to reduce exposure and disease at PVSP. If no significant improvement is made, consider relocating all inmates from this institution to institutions with rates of Coccidioidomycosis equal to or better than their local community rates.

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[3] As per memorandum of August 3, 2006, "INMATE-PATIENTS AT HIGH RISK OF VALLEY FEVER EXCLUDED FROM SPECIFIC CENTRAL VALLEY INSTITUTIONS".

Attachment 1

Reported Cases of Coccidioidomycosis
For
Fresno and Kings Counties[1]
May 24, 2007

Percent of County Cases Reported by State Prisons

FRESNO COUNTY

REPORTED CASES				
YEAR	Fresno County Total	Coalinga-Civilian Total	PVSP Total	Prison % of County Cases
2002	84	4	47	56%
2003	140	23	107	76%
2004	122	6	70	57%
2005	290	42	100	35%
2006	776	154	520	67%
2007*	171	23	79	46%

* Through March 2007

KINGS COUNTY

REPORTED CASES					
YEAR	Kings County Total	Civilian Total	LNAS	Avenal and Corcoran Totals	Prison % of County Cases
2000	11	5	0	6	55%
2001	32	13	1	18	56%
2002	50	24	3	23	46%
2003	42	19	8	15	36%
2004	84	29	17	38	45%
2005	126	54	-	72	57%
2006	168	34	21	113	67%

[1] Provided as a handout at the May 24, 2007 Valley Fever Symposium by the Kern County Health Department in Bakersfield CA. These numbers may vary from the information provided by the UC Davis Coccidioidomycosis Laboratory as they are collected using two different methodologies.

Attachment 2

Coccidioidomycosis* in Inmates of California Correctional Institutions 2000 to Jan-Apr 2007

Prison Bold = Prison in hyperendemic area	Year Opened	2000-2001 **	Mar 2003 to Feb 2004	2005	2006	Jan through Apr 2007	TOTAL by Prison
Pleasant Valley (Coalinga)	**1994**	-	127+1 ****	150	514	137***	929
Avenal	**1987**	36****	22+ 1 ****	47	91	23	220
Corcoran State Prison	**1988**	14	21	23	12	7	77
Corcoran (SATF)	**1997**	-	-	2	22	7	31
CMC – San Luis Obispo		16	7	3	12	5	43
Vacaville (CMF)		8	1	-	2	-	11
CSP Solano		-	-	4	2	1	7
Mule Creek (Ione)		-	-	-	1	2	3
Chowchilla (Women's)		-	1	-	-	-	1
Ironwood (Blythe)		1	3	1	3	-	8
Chuckawalla Valley (Blythe)		1	1	-	1	1	4
Soledad CTF		-	-	5	4	1	10
Susanville		-	-	-	1	-	1
Centinela (El Centro)		-	-	-	-	1	1
CSP Sacramento/Folsom 2		-	-	-	-	1	1
North Kern SP	**1993**	-	-	1	-	-	1
Wasco	**1991**		1	-	-	-	1
Miscellaneous		10	18	8	-	-	36
Camarillo		-	-	-	1	-	1
Ventura Youth Authority		23*****	5	-	6	-	34
TOTAL		**109**	**209**	**244**	**672**	**186**	**1420**

* Using positive serum test for Coccidioidomycosis as bases for diagnosis
** In some instances, onset of disease may have been earlier in 2000
*** April = 23 cases
**** One case in prison employee
***** Note: The CYA cases in 2000 were in inmates who had been assigned to fight grass fires in McKittrick in the highly endemic area of Kern County.
Note 1: CA Correctional Institute (CCI) and Kern Valley State Prison (KVSP) are the two other prisons in the Hyperendemic area and do not have cases documented in this table.
Note 2: Data in this table may vary from the data in Attachment 1 – they are developed using two different data sources.
Note 3: This Attachment was compiled from Tables developed by D. Pappagianis, M. D., for the May 24 2007 Valley Fever Symposium

June 11, 2007

REFERENCES

1. 2007 Symposium on Valley Fever, Kern County Public Health Department, Bakersfield CA – May 24t, 2007 presentations were provided by:
   a. CA Department Health Services:
      Presented by Mark Starr, DVM, NPVM, Chief, Surveillance and Statistics Section, Infection Control Branch, Division of Communicable Diseases, CDHS.
   b. Local Snapshots – Public Health Departments
      i. B. A. Jinadu, MD – Kern County,
      ii. Michael MacLean, MD – Kings County,
      iii. Ed Moreno, MD – Fresno County,
      iv. Robert Levin, MD – Ventura County,
      v. Karen Haught, MD – Tulare County,
      vi. Karen Furst, MD – San Joaquin County, and
      vii. Greg Thomas, MD – San Luis Obispo County
   c. History of Valley Fever by Hans Einstein, MD, MPH, Kern Medical Center
   d. The Burden of Valley Fever on Individuals by Royce Johnson, MD, Kern Medical Center.
   e. Valley Fever Societal Costs by John Caldwell, Pharm. D., Kern Medical Center.
   f. Vaccine Development, Research and Funding by George Rutherford, MD, MPH
   g. Epidemiology and Testing for Valley Fever – Panel
   h. Epidemiology of Valley Fever by Mark Starr, DVM, NPVM
   i. Valley Fever in Correctional Facilities by Demosthenes Pappagianis, MD, PhD UC Davis
   j. Seventy Years of Skin Testing by Thomas Larwood, MD., Kern County

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ATTACHMENT 3

Coccidioidomycosis in California State Correctional Institutions

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Coccidioidomycosis Serology Laboratory

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KEYWORDS:

coccidioidomycosis, prisoners, prisons

ABSTRACT

Coccidioidomycosis (CM) has been recognized in inmates of California State prisons since 1919. CM has been diagnosed in inmates of various correctional facilities inside and outside the known endemic areas. In recent years construction of new prisons within endemic areas has led to an increase in the number of cases of CM. In the years 2005 and 2006, particularly affected have been the Pleasant Valley State Prison (PVSP) near Coalinga and Avenal State Prison (ASP) near Avenal on the Western side of the San Joaquin Valley. In 2005, our serologic testing yielded 150 new cases from PVSP, 30 from ASP. The incidence rate in 2005 for PVSP (population approx. 5,000) would be at lest 3,000 per 100,000, greater in 2006. Some cases recognized in 2006 likely began in 2005). Some cases are medically managed on site but very ill inmates have had care in non-prison facilities. Estimates of the cost per patient have varied from $8,000 in the 1990's to $30,000 more recently. Thus, there are important medical, demographic and financial implications to the State.

INTRODUCTION

For many years, coccidioidomycosis (CM) has been encountered in inmates of prisons in the endemic areas of the Southwestern United States. In recent years, new prisons have been constructed in coccidioidal endemic areas of California and this has resulted in an expanded problem with this disease among inmates and employees; a problem which has attracted our attention.

CM apparently was first recognized in an inmate of Folsom Prison in California in 1919.[1] This prison, near Sacramento was not in the area(s) to which this disease is endemic exemplifying how cases of the disease may be encountered outside the endemic zones. This

also is exemplified by a prisoner in Boise, Idaho whom we have followed serologically for some years after his acquisition of CM in California.

Other instances of CM in incarcerated persons occurred during World War II among Japanese-Americans forced into a camp near Casa Grande, Arizona, and among German prisoners of war in Florence, Arizona.[2] Among German prisoners of war some complained of mistreatment as a result of lethal and other coccidioidal infections, under the Geneva Convention Rules and this led to discontinuation of the use of the Florence, AZ facility for foreign prisoners; but it has continued to house civilian prisoners. In the 1950's and later, CM was described among young men prisoners who were sent to fight fires in endemic areas of Los Angeles County and elsewhere.[3,4]

For many years, our UC Davis Coccidioidomycosis Serology Laboratory has received serum specimens from incarcerated individuals who have or are suspected of having coccidioidomycosis. For example, sera had been submitted by Dr. D. Smilovitz and others from infected inmates in the California Men's Colony in San Luis Obispo County. In the year 2000, our attention was called to an outbreak of CM among inmates of the California Youth Authority, Paso Robles, who had been assigned to fight grass fires in McKittrick in the highly endemic area of Kern County. This led us into compilation of cases from other State Prisons.[5,6] The occurrence of CM in inmates has important implications—to the State and its citizens: medical, demographic, and financial.

MATERIALS AND METHODS

The cases of coccidioidomycosis were detected by positive serologic tests on serum or other body fluids. Testing was carried out at our UC Davis Coccidioidomycosis Serology Laboratory. Initial testing was carried out by immuno-diffusion of specimens after being concentrated approximately eight-fold by evaporation under reduced pressure.[7,8] Patients were identified by name, date of birth and inmate (California Department of Corrections) identification

number. In many instances, for logistical reasons, specimens from several inmates were drawn on the same date rather than in relationship to clinical indications. As a result of this, it was not possible to know the date of onset of illness thus usually precluding recording cases by month. Moreover, on some occasions it was evident that sera from some inmates came by way of some intermediate laboratory obscuring the provenance of the specimen. In Figure 1 we have presented a map of California indicating the location of prisons (name underlined) with respect to recognized areas to which CM is endemic. The more detailed map in Figure 2 indicates the relative positions of three prisons significantly represented among the cases we have tabulated: Coalinga (Pleasant Valley State Prison), Avenal, and Corcoran.

RESULTS

Simply expressed are the numbers of cases recognized serologically: Tables 1, 2, 3 and 4. Note that the data of Table 1 were obtained before Pleasant Valley State Prison (PVSP) was completed. Following its inclusion, PVSP became the largest contributor of cases Figure 3 illustrates the influence of "new construction" (including excavation) for a mental health hospital near (perhaps 200 yards from) PVSP. Construction began in late Summer to early Fall and soon the number of case increased. (As noted in Materials and Methods) some cases recorded for a given month was based on the date of the positive serum, but might have been drawn in an adjacent month. It was evident that PVSP had a higher rate of infections than other institutions some of which had comparable numbers of inmates. By mid-August 2006, PVSP had 300 new cases recognized, far exceeding those recognized (51) of Avenal, the next highest represented. We calculated incidence of 3,000/100,000 for PVSP in 2005; and in 2006 up to mid-August the rate was 6,000/100,000. For comparison, the highest incidence rate of CM was 572/100,000 for Kern County during the epidemic year 1998. By mid-August, the total reported cases of CM in California were approximately 1,300. Thus, the total cases 388, of state prisons (Table 4) represented approximately 30% of the cases reported to the California State Department of

Health Services. In 2005, the state prison cases (244) represented 15% of the total reported case[5] (approximately 1,600) in California.

Based on studies in Kern County during the epidemic years of the 1990's, the cost of care per patient was $8,000.[9] The 388 patients detected in State Prisons, based on the figure of Caldwell et al would have cost $3,104,000.00. Others have calculated that the cost per hospitalized patient (in 1998-2001) was approximately $34,000.[10] Inasmuch as approximately 5 per cent of patients with clinical evidence of coccidioidomycosis undergo metapulmonary dissemination of their disease, of the 388 patients at least 20 would have required hospitalization at a cost of $780,000. Therefore, the fiscal impact to the State is substantial.

DISCUSSION

Incarcerated individuals and employees of correctional institutions in endemic areas may acquire coccidioidomycosis. Because incarcerated individuals have centralized medical care, some compilation of cases is possible. Enumeration of cases among employees is more difficult because they do not have a unified source for medical care.

Coccidioidal infections can be acquired by inmates within the institutions to which they have been confined, or, as illustrated above, by inmates who have been confined in institutions outside the endemic areas but have been assigned to fight fires in endemic areas.

Occasionally prisoners are transferred from one California State Prison to another. In some instances, an individual already afflicted with coccidioidomycosis may baffle an unsuspecting medical staff owing to the mimicry of coccidioidomycosis for other diseases or because the medical staff does not appreciate that the patient/inmate had previously been in the endemic area. One striking example of this is a male prisoner in an institution in a non-endemic Idaho as cited above who acquired his coccidioidal infection in California.

Drastic consequences followed in a former prisoner who acquired his coccidioidal disease in prison in Arizona but who then moved to Alabama where he became moribund

cerebrovascular episode deemed to be lethal. His physicians in Alabama were not initially aware of his prior coccidioidomycosis, and donated his kidneys and liver to awaiting recipients. At 19 and 17 days after transplantation respectively the recipient of one kidney and the recipient of the liver died with fulminant coccidioidomycosis.[11] Owing to the varying severity of coccidioidomycosis, the intensity and strategy in the treatment of inmate/prisoners can pose a challenge to prison physicians and their often-limited resources. As a result there are occasions when the inmate/patient's illness requires more complex management modalities that are available at "outside", non-prison referral hospitals. An example, treatment of spinal coccidioidomycosis, provided valuable information on management of severe coccidioidomycosis.[12]

An additional problem pertains to patient/inmates who acquire coccidioidomycosis and are subsequently discharged after they have completed their sentence. Uncertainty about their clinical status and about how and where to seek medical attention may result in or be followed by recrudescence of coccidioidal disease. At least one such individual died following his belated ~~lower~~ case channeling into a medical care center.

One aspect of coccidioidomycosis that could be defined is the influence of certain intercurrent diseases present among inmates (e.g. hepatitis C) on the course of coccidioidomycosis. Additional valuable information may also accrue from the medical and surgical attention provide to inmates as mentioned above relative to spinal surgery.[12]

Some cases of CM can be anthropogenic, as in the construction of a mental health facility adjacent to Pleasant Valley State Prison, or can result form the expected seasonal/climatic associations which influence the rise and fall of incidence. However, the incarceration of individuals from non-endemic areas, in Federal [13] as well as State prisons within the endemic areas will continue to provide a stream of challenging and costly cases of coccidioidomycosis.

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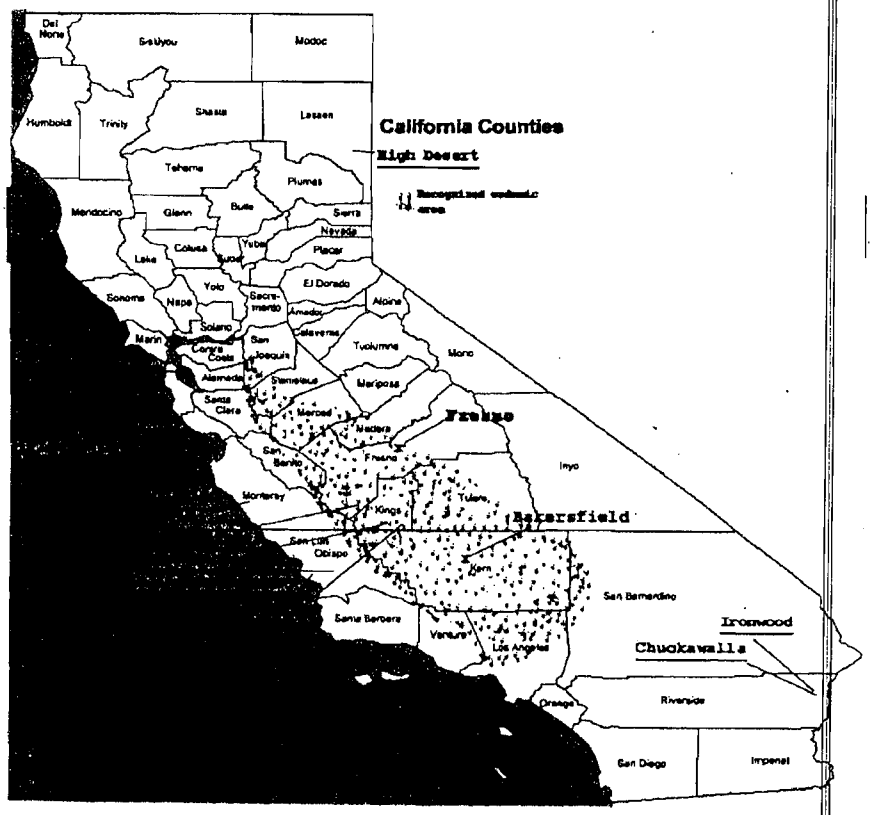
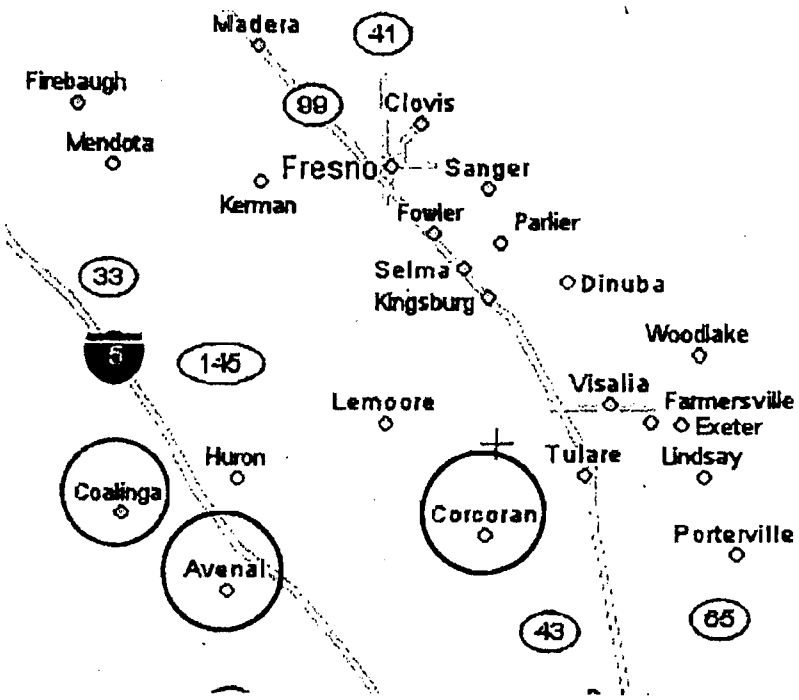
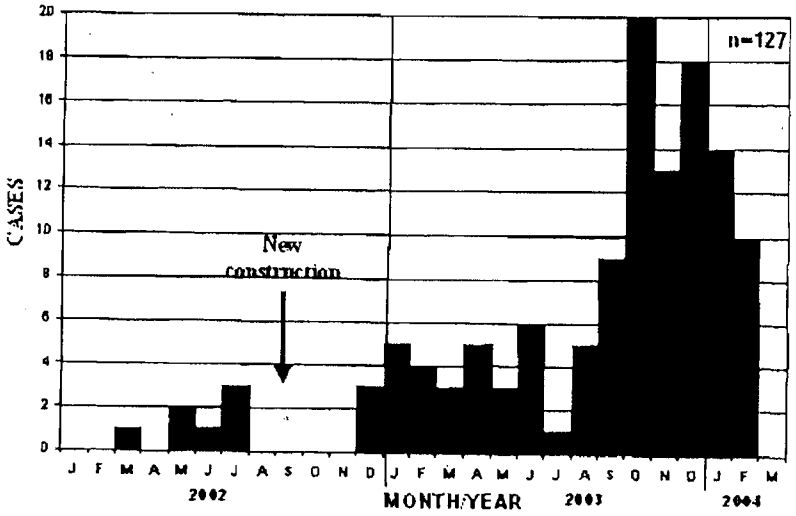


Map of California and recognized endemic area with prison locations (names underlined).



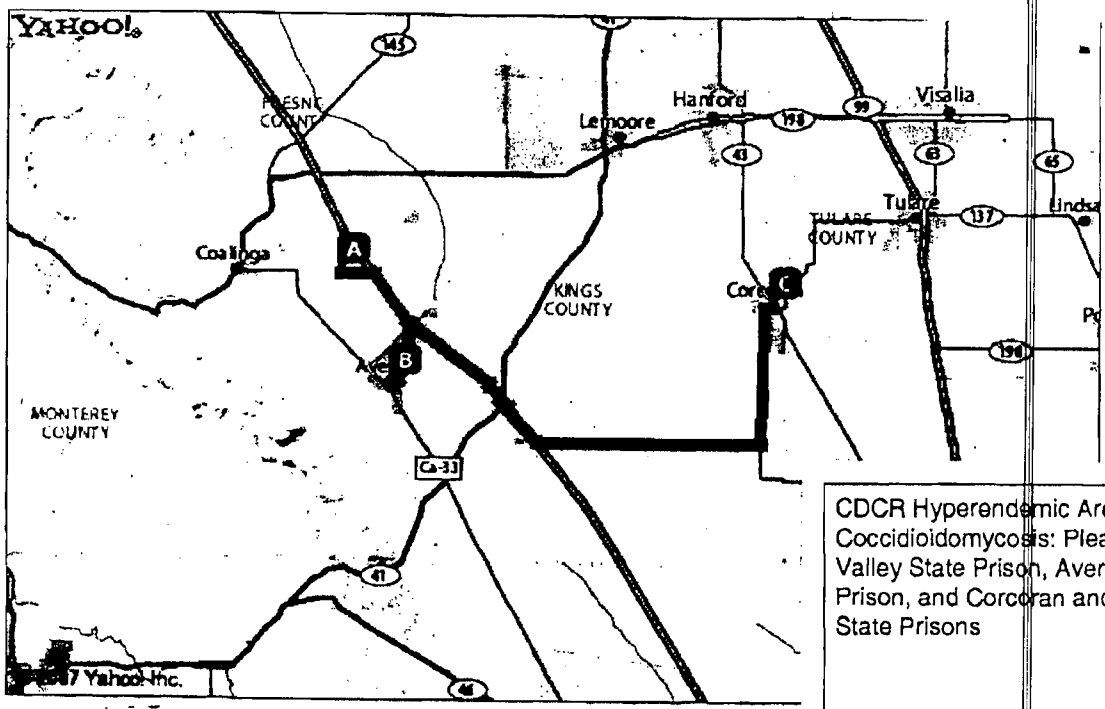
Three State prisons in the western San Joaquin Valley.



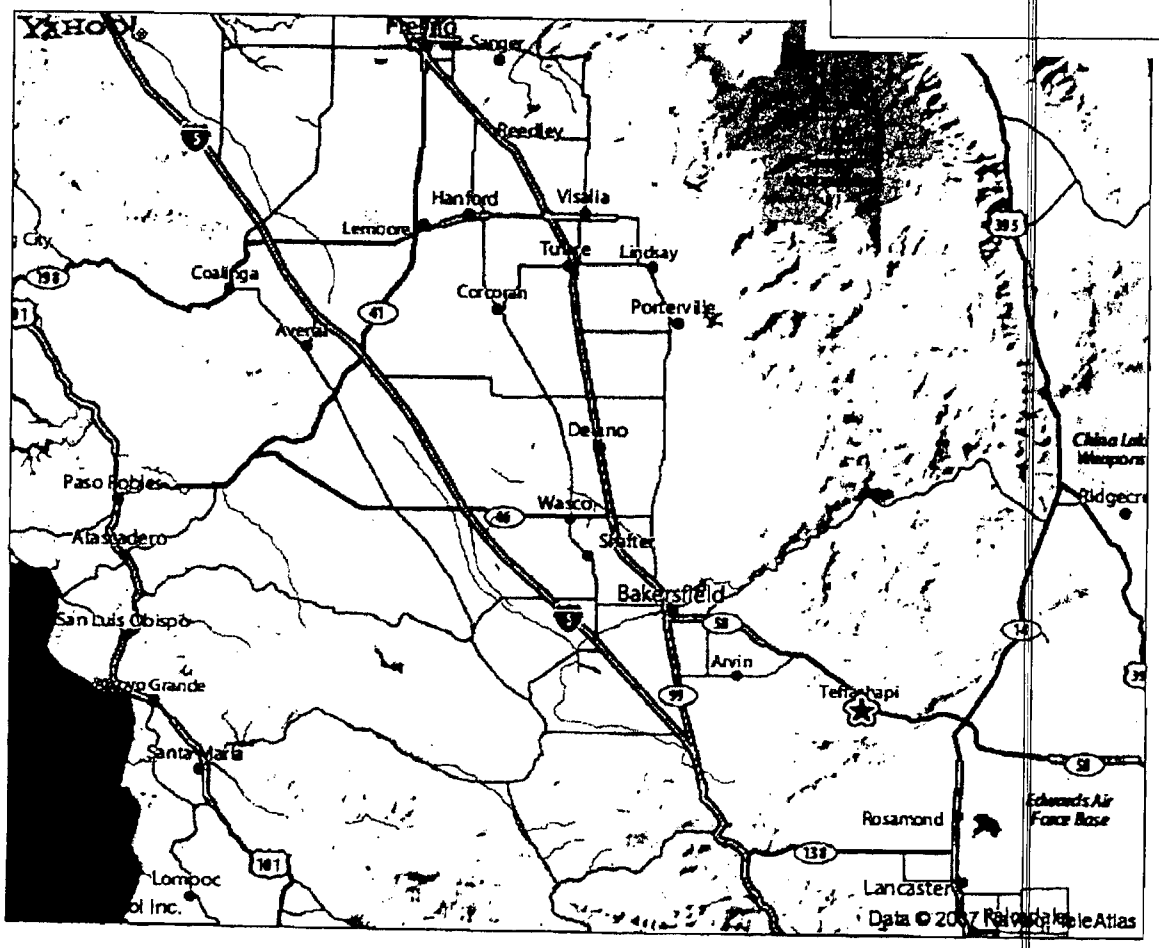
Cases of CM at Pleasant Valley State Prison between January 2002 and March 2004. Approximate time of construction of a mental health hospital near the prison is designated with an arrow.

Attachment 4

CA DEPARTMENT OF CORRECTIONS AND REHAILITATION
HYPERENDEMIC AREA
FOR
COCCIDIOIDOMYCOSIS



CDCR Hyperendemic Area for Coccidioidomycosis: Pleasant Valley State Prison, Avenal State Prison, and Corcoran and SATF State Prisons

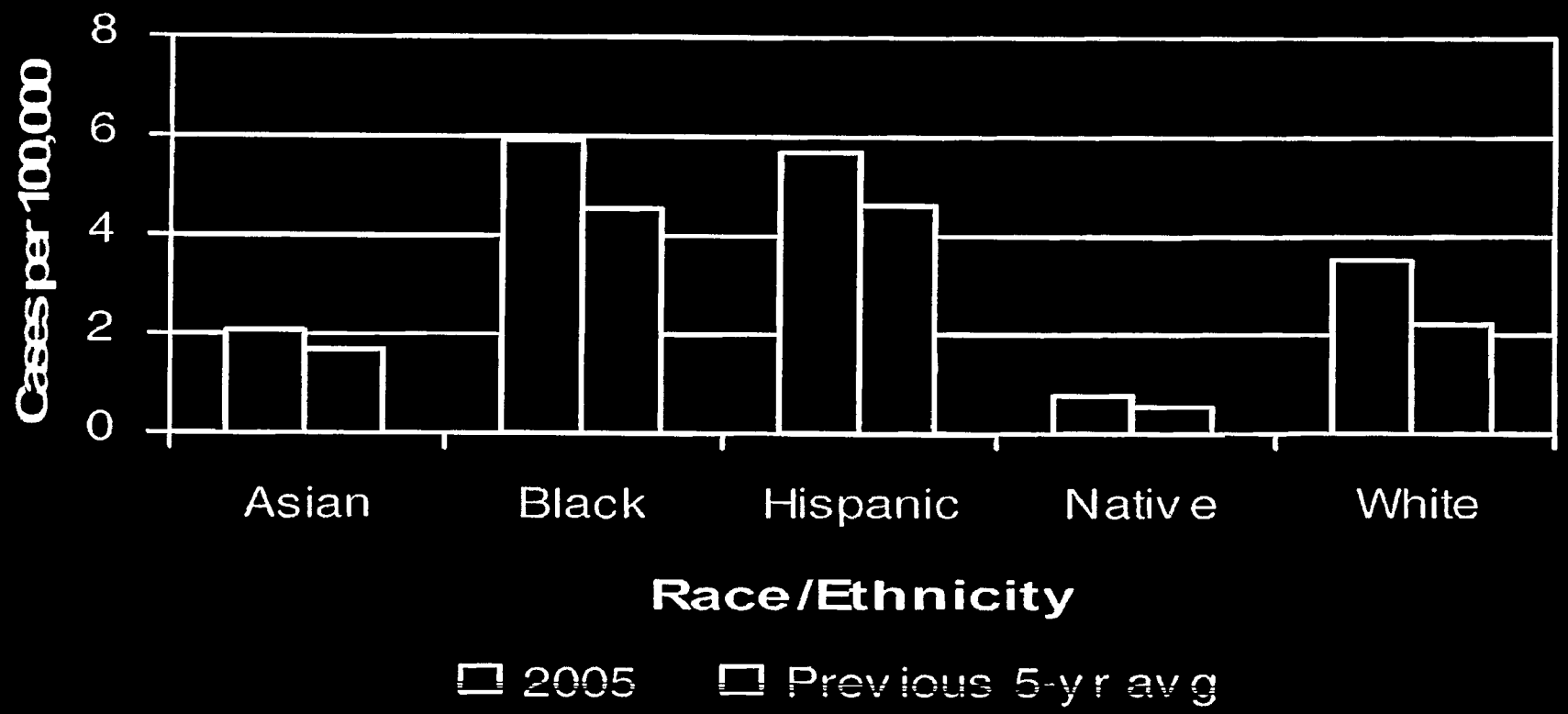


Risk Factors for Coccidioidomycosis

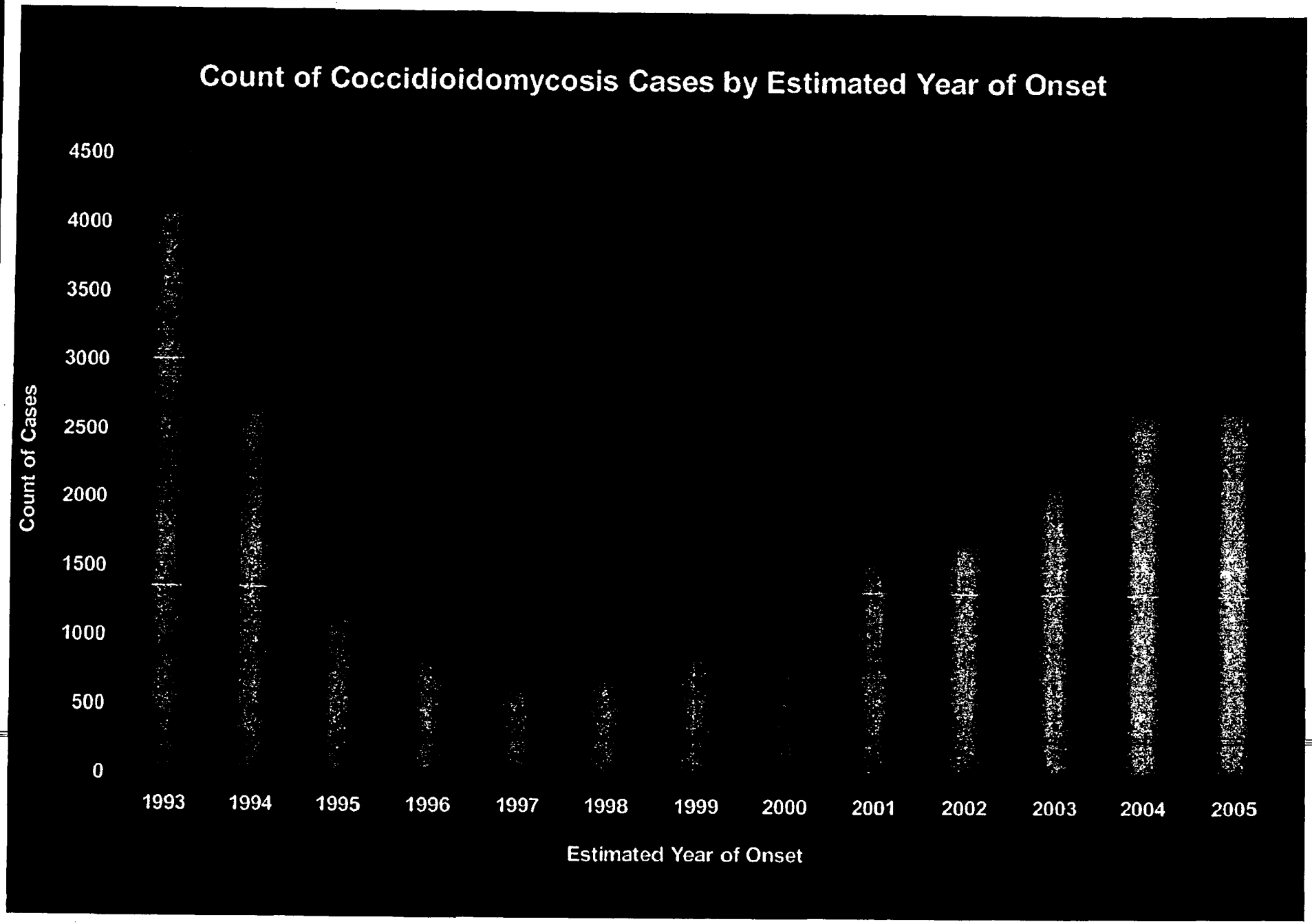
- Region
- Weather
- Soil disturbance
- Lack of prior exposure

- For disseminated disease:
  - Immunosuppression and/or some chronic diseases
  - Male gender (and females in late pregnancy)
  - Race (e.g., Black, Filipino)

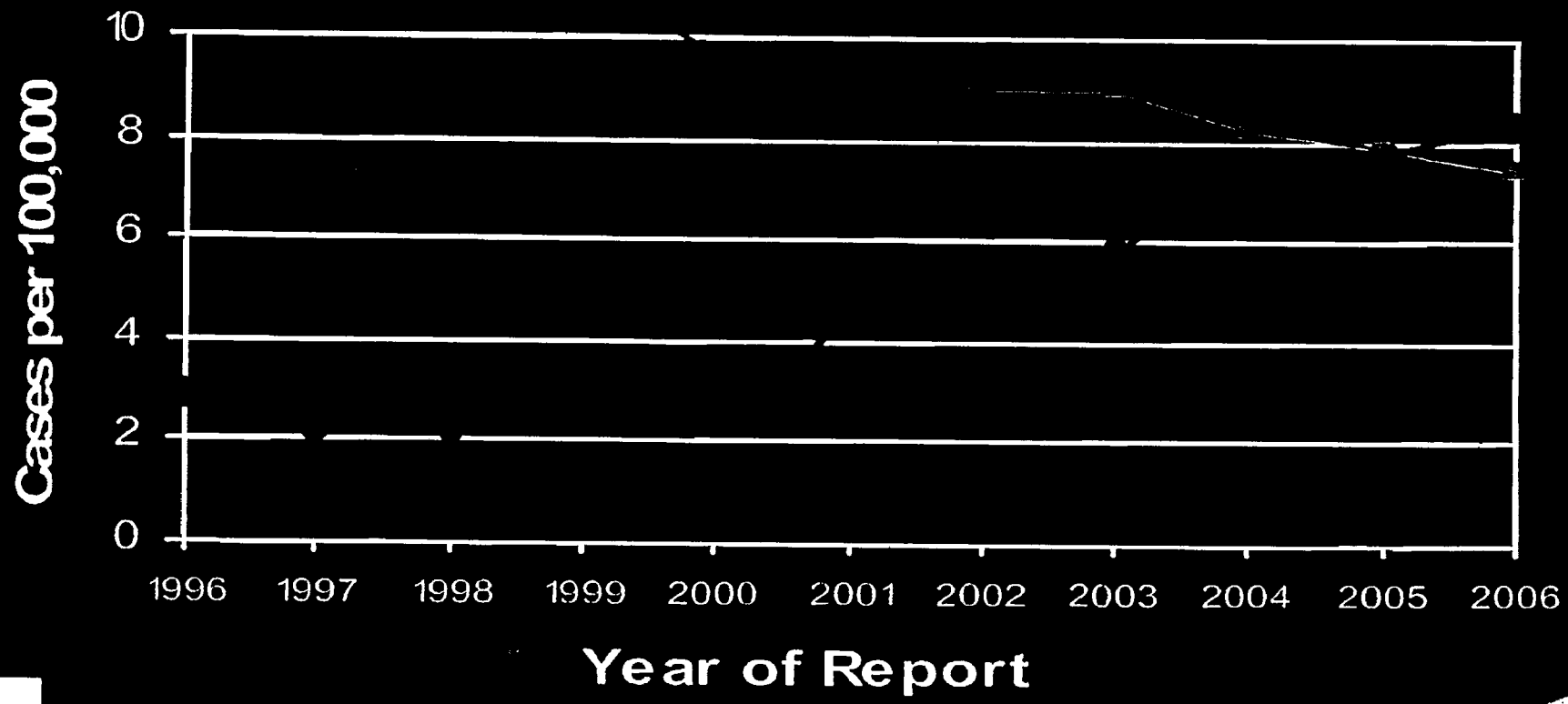
COCCIDIOIDOMYCOSIS
Rates by Race/Ethnicity, California, 2005 and Previous 5-year Average



45.9% of 2005 and 38.2% of 2000–2004 cases reported without race/ethnic detail do not contribute to this graph.


Count of Coccidioidomycosis Cases by Estimated Year of Onset
Count of Cases
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
Estimated Year of Onset

and
California, 1996 - 2006



Rate by Local Health Jurisdiction ranges from 0 to 223 (Kern County, 2005).

Coccidioidomycosis by County
California, 2000

County Rates
(cases per 100,000)

- No Cases Reported
- Between 0 and 5
- Between 5 and 25
- Above 25

STATE OF CALIFORNIA

DEPARTMENT OF CORRECTIONS AND REHABILITATION

FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT

PUBLIC WORKSHOP/SCOPING MEETING

REPORTER'S TRANSCRIPT OF PROCEEDINGS

PASO ROBLES, CALIFORNIA

WEDNESDAY, OCTOBER 21, 2009

1:30 P.M. - 7:00 P.M.

REPORTED BY CHRISTINE PLOSSER

CSR NO. 6333, RPR

Page 2

1 APPEARANCES:
2 THE ADMINISTRATIVE DIRECTOR:
3 STATE OF CALIFORNIA DEPARTMENT OF
CORRECTIONS AND REHABILITATION
4 P.O. BOX 942883
SACRAMENTO, CA 94283-0001
5 ROBERT SLEPPY
(916) 255-2159
6
7
8 ALSO PRESENT:
9 GARY D. JAKOBS, AICP
EDAW/AECOM
10
ROB REID, SAN LUIS OBISPO COUNTY
11 SHERIFF-CORONER
12 THOMAS L. JENKINS
OFFICE OF THE SHERIFF
13 COUNTY OF SANTA BARBARA
14 MATT JENKINS
RICK SWAN
15 CAL FIRE - SAN LUIS OBISPO
COUNTY FIRE DEPARTMENT
16
DAVID E. BACIGALUPO
17 STATE OF CALIFORNIA, DEPARTMENT OF
CORRECTIONS AND REHABILITATION
18
CAPTAIN JOE COCKE
19 SAN LUIS OBISPO COUNTY SHERIFF-CORONER
20 JIM BONNEFIELD,
CDCR
21
22 NANCY MACKENZIE
KRISTEN STONER
23 NICK GIANNINI
LAURA ENDERTON
24 GEOFFREY SIMCOE
DEBORAH JOHNSON
25

Page 3

1 AFTERNOON SESSION
2 --OOO--
3 DIRECTOR SLEPPY: IF WE HAVE FOLKS THAT WOULD
4 LIKE TO SPEAK, HAND IN A CARD. WE WOULD LIKE TO KNOW
5 WHO YOU ARE, AND WE'VE GOT A COURT REPORTER WHO IS GOING
6 TO GET EVERY WORD AND PUNCTUATION. TALK CLEARLY IF YOU
7 COULD AND ONE PERSON AT A TIME. WE'RE HERE TO LISTEN TO
8 PRIMARILY YOUR THOUGHTS ON OUR SCOPE OF ISSUES. BUT IF
9 YOU HAVE A GENERAL COMMENT OR CONCERN EXPRESSED, THAT'S
10 FINE. WE WELCOME THAT. YOU CAN REPEAT ISSUES TO MAKE
11 EMPHASIS OR YOU CAN DEFER TO OTHERS. WE DON'T CARE.
12 WE'D LIKE YOU TO STICK TO A SHORT TIME FRAME, BUT
13 OBVIOUSLY WE DON'T HAVE A CROWD.
14 SO WITH THAT, THE MICROPHONE SHOULD BE ON UP
15 THERE, AND YOU CAN JUST STAND UP HERE AND TALK IN FRONT
16 OF US. IF YOU WANT TO JUST TALK PRIVATELY TO THE COURT
17 REPORTER WHEN WE'RE DONE WITH THIS SESSION, YOU CAN JUST
18 SIT WITH HER AND GIVE HER YOUR COMMENTS OR PUT IT ON A
19 PIECE OF PAPER. WE'RE REALLY GLAD YOU'RE HERE.
20 WE HAVE A MEETING THIS EVENING. IF THERE'S AN
21 ORGANIZATION YOU KNOW ABOUT WHO WOULD LIKE TO HAVE US
22 COME TALK TO, BUSINESS ORGANIZATION OR COMMUNITY
23 ORGANIZATION, WE'D BE GLAD WITHIN REASON TO COME BACK
24 AND DO THAT. SO THANK YOU. SO ANYONE WANT TO GET UP
25 AND SPEAK?

Page 4

1 SUPERVISOR MECHAM: JUST ONE QUICK QUESTION.
2 DIRECTOR SLEPPY: THIS IS SUPERVISOR FRANK
3 MECHAM.
4 SUPERVISOR MECHAM: I'M SUPERVISOR MECHAM,
5 FIRST DISTRICT. THE DISCUSSION WITH LOCAL HOSPITALS, IS
6 THERE GOING TO BE ANY IMPACT OR ANY RELATIONSHIP THAT'S
7 GOING TO BE REQUIRED WITH LOCAL HOSPITALS?
8 DIRECTOR SLEPPY: WE ARE SPECIFICALLY --
9 BECAUSE WE ARE NOT BRINGING IN ALL INMATES, ALTHOUGH
10 WE'RE GOING TO SCREEN THEM FOR INMATES THAT TYPICALLY
11 JUST NEED ROUTINE APPLICATION, BUT THEY DON'T GET TO
12 LEAVE THE PRISON. MEDICAL CARE, WE WILL MAKE SURE THE
13 LOCAL HOSPITAL HAS THE CAPACITY. I BELIEVE THE MEDICAL
14 RECEIVER HAS INVESTED SOME FUNDS INTO THE LOCAL
15 HOSPITAL.
16 WE HAVE A SECURED WARD ALREADY. BUT, YES,
17 WE'LL LOOK AT THAT AND AS WELL AS INCREASING 911 CALLS
18 TO THE FACILITY BECAUSE WE DO TEND TO USE LOCAL
19 EMERGENCY SERVICES. SO WE WILL LOOK AT THAT AND MAKE
20 SURE WE'RE NOT UNFAIRLY OVERLOADING I'M SURE WHAT IS A
21 CHALLENGED SYSTEM. THANK YOU FOR REMINDING ME. I
22 NEEDED TO SAY THAT.
23 MS. SUSAN DECARLI: THANK YOU. MY NAME IS
24 SUSAN DECARLI, CITY OF PASO ROBLES. YOU'VE PROBABLY
25 ALREADY HAD NUMEROUS CONVERSATIONS AND I KNOW THAT THE

Page 5

1 COUNCIL'S SUPPORTED YOUR PROJECT TO OUR CITY, BUT FROM
2 THE PLANNING DEPARTMENT, YOU MAY HAVE ALSO HAD
3 CONVERSATIONS WITH THEM. I JUST WANTED TO MENTION TO
4 YOU ITEMS THAT THE SCOPE OF THE PROJECT SHOULD INCLUDE
5 WITHIN THE ENVIRONMENTAL REVIEW.
6 CURRENTLY THE CORNER OF AIRPORT ROAD AND DRY
7 CREEK ROAD IS SOMEWHAT OF AN EYE SORE, SO I WAS CURIOUS
8 TO WHAT EXTENT THERE WILL BE ANY EXTERIOR BUILDING OR
9 SOD RENOVATIONS OR IS IT JUST GOING TO STAY THE SAME,
10 THE EXTENT OF LANDSCAPE SCREENING PERHAPS ON THE
11 EXTERIOR OF THE FENCES.
12 AND IN TERMS OF THE PROJECT ITSELF, YOU
13 MENTIONED AIR QUALITY, CLIMATE CHANGE, GREENHOUSE GAS
14 ANALYSIS. WILL THE PROJECT ENVIRONMENTAL DOCUMENT ALSO
15 BE LOOKING AT ENERGY CONSUMPTION AND WILL THERE BE ANY
16 RENEWABLE ENERGY RESOURCES EITHER ON SITE OR OUTSIDE?
17 JUST CURIOUS IF YOU'RE GOING TO RETROFIT THE EXISTING
18 ENERGY SYSTEMS OR ADD NEW ONES.
19 BIOLOGICALLY YOU MENTIONED BIRDS AND THE
20 ELECTRIC FENCES. THERE ARE A PAIR OF GOLDEN EAGLES THAT
21 ROOST OFF OF GOLDEN HILL ROAD, SO I WANT TO MAKE SURE
22 YOUR BIOLOGISTS CHECK INTO THAT. ALSO, THERE'S OUR
23 FAVORITE KIT FOX THAT RUN AROUND THE AREA. I DON'T KNOW
24 IF THEY HAVE ACCESS TO THE SITE WITH THE FENCE PROGRAM.
25 AGAIN, I'M SURE YOU'RE GOING TO GET YOUR TAKE FROM US

Page 6

1 AND FROM OTHER AGENCIES.
2 IN TERMS OF MORE LAND USE COMPATIBILITY
3 ISSUES, IT WOULD BE GREAT TO SEE WHAT YOU'RE GOING TO
4 PROPOSE HERE FOR A LIGHTING PLAN FOR THE BUSINESS PARK
5 AND THE AIRPORT. MAKE SURE THERE'S AN AIRPORT
6 COMPATIBILITY PLAN THERE.
7 AND THEN WE SEE YOU'RE UPDATING THE
8 CIRCULATION ELEMENT WHICH DOES INCLUDE PARALLEL ROUTE
9 STUDY AND SOME CONNECTIONS WITH GOLDEN HILL ROAD OVER TO
10 AIRPORT ROAD.
11 I WAS CURIOUS IF THIS PROJECT IS GOING TO BE
12 PARTICIPATING ON THE BRIDGE CONNECTION TO PROVIDE A NEW
13 PARALLEL ROUTE FOR YOUR STAFF TO AND FROM THE SITE FROM
14 GOLDEN HILL ROAD OUT TO AIRPORT ROAD AND JUST TO MAKE
15 SURE THAT CIRCULATION WITH TRAFFIC TRANSPORTATION
16 ANALYSIS LOOKS AT OUR POLICIES AND CIRCULATION ELEMENT
17 UPDATE. THOSE ARE KIND OF JUST THE CURSORY THINGS THAT
18 ARE INVOLVED IN YOUR PROJECT. I JUST WANTED TO MENTION
19 THOSE ARE SOME OF THE ISSUES THAT SHOULD BE LOOKED INTO
20 WITH ANY PROJECT IN THIS AREA.
21 DIRECTOR SLEPPY: THANK YOU. JUST REAL QUICK
22 ON A COUPLE OF THOSE. WE ARE TRYING TO SEE WHAT WE CAN
23 DO ABOUT LANDSCAPING. OUR DEPARTMENT HAPPENS TO LIKE
24 THE VIEW OF FENCES. WE THINK THEY'RE ATTRACTIVE, BUT
25 OTHERS DON'T. SO WE ARE WORKING ON THAT. GARY JAKOBS

Page 7

1 AND HIS FIRM IS VERY PARTICULARLY SKILLED AT PUTTING NET
2 OVER THE TOP OF THE LETHAL FENCE. WE HAVE A LONG-TERM
3 MONITORING PROGRAM. WE HAVE VERY LITTLE BIRD LOSS
4 BECAUSE WE KEEP THAT AREA FROM THE BIRDS GETTING IN
5 THERE. SO WE ARE VERY CONSCIENTIOUS ABOUT THAT. PLUS
6 WE ARE GOING TO PROVIDE A HABITAT OFF IN A CORNER UP
7 THERE. WE'RE TRYING TO OPEN UP SOME OF THAT FENCING
8 THAT WE DON'T ACTUALLY NEED ANY LONGER ALONG THE
9 PROPERTY LINE.
10 THE KIT FOXES, I DON'T THINK THEY GET IN THERE
11 NOW. BUT AT LEAST THEY CAN WANDER THROUGH THERE. WE
12 ARE REALLY GOOD ABOUT CONSERVATION. NICK CAN TALK ABOUT
13 THE NEW FACILITY IF YOU WANT HIM TO. WE TRY TO GO AT A
14 VERY HIGH LEVEL. THE STATE LAWS ARE VERY STRONG ON
15 CONSERVATION, AND GEOFF IS GOING TO DO THE SAME AS HE
16 GOES BACK THROUGH THE OLD FACILITY SITE.
17 I HOPE WE GET PRETTY HIGH MARKS FOR WATER
18 CONSERVATION AND ENERGY CONSERVATION. AND WE WILL LOOK
19 AT THAT, AS WELL AS WE ARE QUITE CONCERNED WITH
20 TRANSPORTATION BECAUSE WE WOULD BE ADDING CARS TO
21 GETTING IN AND OUT OF THERE. AND WE LOOK FORWARD TO
22 WORKING WITH THE CITY ON THAT STUDY.
23 MS. DECARLI: TRANSPORTATION IS NOT JUST
24 AIRPORT ROAD. IT'S GETTING FROM GOLDEN HILL OVER, WHICH
25 COULD EASE UP YOUR CONGESTION.

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1 DIRECTOR SLEPPY: CALTRANS PROMISED TO BUILD
2 AN OVERPASS FOR US BUT APPARENTLY DIDN'T DO IT WHEN WE
3 WERE PLANNING 46. ONLY KIDDING. ANYONE ELSE? WE'RE
4 HERE IF YOU WANT TO TALK TO US INDIVIDUALLY. WE'RE GLAD
5 YOU CAME OUT. WE LOOK FORWARD TO ANYONE ELSE COMING OUT
6 TONIGHT. WE APPRECIATE SUPERVISOR MECHAM SHOWING UP
7 BECAUSE WE KNOW HE HAS A LOT TO DO.
8 (THE AFTERNOON SESSION ENDED AT 2:45 P.M.)
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1 EVENING SESSION
2 --OOO--
3 DIRECTOR SLEPPY: I'M GOING TO GIVE YOU A
4 LITTLE PRESENTATION ABOUT OUR PROJECT. GARY JAKOBS IS
5 HERE TO FOLLOW ME WITH SOME ENVIRONMENTAL INFORMATION.
6 WE'RE GLAD YOU'RE HERE. WE HOPE YOU PASS ON INFORMATION
7 TO OTHERS. DEPARTMENT OF CORRECTIONS AND REHABILITATION
8 IS STARTING -- THIS IS THE VERY START OF THE REQUIRED
9 ENVIRONMENTAL REVIEW PROCESS FOR A PROJECT UNDER
10 CALIFORNIA LAW. THE DEPARTMENT'S JUST LIKE SOMEBODY
11 APPLYING FOR A PERMIT FROM THE CITY OF PASO ROBLES. BUT
12 IN THIS CASE WE ARE THE LEAD AGENCY AND WE HAVE TO GO
13 THROUGH THIS PROCESS THAT PROVIDES INFORMATION TO THE
14 PUBLIC, CITY REGULATORS ON WHAT THE POTENTIAL
15 ENVIRONMENTAL CONSEQUENCES ARE OF US BUILDING THIS
16 PROJECT.
17 WE HAVE A QUICK AGENDA HERE TONIGHT. WE'RE
18 GOING TO TALK FOR A WHILE AND RUN THROUGH SOME SLIDES,
19 AND THEN WE'RE GOING TO GIVE ANYBODY THE OPPORTUNITY TO
20 GIVE US SOME COMMENTS ON THE SCOPE OF ISSUES THAT YOU
21 THINK WE SHOULD ADDRESS IN THE ENVIRONMENTAL IMPACT
22 REPORT AND/OR IF YOU HAVE SOME CONCERNS OR OBJECTIONS
23 ABOUT THE PROJECT. WE HAVE BROUGHT THE WORLD'S EXPERTS
24 ON ALL THE STUFF WE DO TONIGHT. LOOKS LIKE WE HAVE A
25 LOT OF PEOPLE AND WE HAVE A LOT OF EXPERTISE

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1 REPRESENTED. SO I THINK IF YOU HAVE A DIRECT QUESTION,
2 WE SHOULD BE ABLE TO ANSWER IT. SO HERE WE GO.
3 NUMBER ONE, WHO IS ALL UP HERE? WE HAVE THE
4 PEOPLE FROM THE DEPARTMENT OF CORRECTIONS AND
5 REHABILITATION WHO WILL IMPLEMENT THIS PROJECT. WE HAVE
6 A PARTNER IN THIS PROJECT WHICH IS CAL FIRE, MATT
7 JENKINS, WHO WILL BE TALKING ABOUT THE CONSERVATION
8 CAMP. WE HAVE TWO PARTNERS WHO ARE REPRESENTING SANTA
9 BARBARA AND SAN LUIS OBISPO SHERIFFS TONIGHT WHO WILL
10 SPEAK FOR A LITTLE WHILE.
11 WE HAVE OUR GREAT STAFF HERE. WE HAVE PEOPLE
12 WHO KNOW REENTRY, ESPECIALLY ALL THE ISSUES AND HOW
13 WE'RE GOING TO OPERATE. WE HAVE A CUSTODY OFFICER, A
14 GUY WHO WILL ACTUALLY TAKE YOU OUT IN THE PARKING LOT
15 AND SHOW YOU HOW TO USE THE BATON. AND WE HAVE OUR VERY
16 GOOD ENVIRONMENTAL CONSULTANT.
17 WHAT ARE WE TALKING ABOUT BUILDING? WE HAVE
18 ON THAT BOARD BACK THERE -- I'LL SHOW YOU A SLIDE IN A
19 MINUTE. THE STATE OF CALIFORNIA DEPARTMENT OF
20 CORRECTIONS HAS CONTROLLED FOR A LONG TIME, ALMOST OVER
21 50 YEARS, 160 ACRES OFF AIRPORT ROAD THAT FOREVER AND
22 EVER WAS THE BOYS YOUTH AUTHORITY FACILITY THAT DAVE
23 BACK THERE USED TO RUN. THAT PROPERTY IS NOW
24 ESSENTIALLY SURPLUS.
25 THE STATE OF CALIFORNIA HAS SEEN A DRAMATIC

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1 DROP IN THE NUMBER OF WARDS THAT WE HAVE TO TAKE CARE
2 OF. OUR POPULATION HAS GONE FROM 10,000 DOWN TO
3 ACTUALLY UNDER 2,000 RIGHT NOW. SO WE HAVE A LOT OF
4 EXCESS CAPACITY IN OUR JUSTICE FACILITIES STATEWIDE. WE
5 DO NOT SEE THAT POPULATION COMING BACK UP AGAIN BECAUSE
6 THE COUNTY IS TAKING OVER THAT RESPONSIBILITY.
7 IN JULY 2008, WE FORMALLY CLOSED THE PASO
8 ROBLES FACILITY. SO AT THIS POINT IT IS CLOSED DOWN.
9 JOBS ARE GONE, WARDS ARE GONE, AND WE'RE SITTING THERE
10 WITH A PERFECTLY GOOD FACILITY THAT WE BELIEVE CAN BE
11 USED FOR SOMETHING ELSE. AND WHAT THAT SOMETHING ELSE
12 IS PRIMARILY IS TO TAKE THE OLD JUSTICE FACILITY AND
13 MAKE IT INTO AN ADULT CORRECTIONAL FACILITY. LEVEL TWO
14 ONLY. WE'RE GOING TO DO SOME SECURITY IMPROVEMENTS TO
15 MAKE THAT A SECURE FENCE.
16 THE SECOND THING WE WANT TO DO OUT THERE
17 BECAUSE WE HAVE ALL THIS GREAT PROPERTY THAT IS
18 UNENCUMBERED BY DEVELOPMENT, WE WANT TO BUILD A 500-BED
19 SECURE REENTRY FACILITY. THIS IS A NEW FACILITY WE'RE
20 PROPOSING THAT WILL HOPEFULLY REDUCE THE RETURN RATE OF
21 OUR INMATES ONCE THEY'VE BEEN PATROLLED. THIS IS A
22 FACILITY FOR INMATES IN THEIR LAST 12 MONTHS. IT IS A
23 PROGRAM-BASED FACILITY WITH JOB TRAINING, EDUCATION,
24 PERSONAL BEHAVIOR ISSUES. THIS FACILITY WILL SERVE
25 THREE COUNTIES EXCLUSIVELY, SANTA BARBARA, SAN LUIS

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1 OBISPO, AND SAN BENITO.
2 WE HAVE A THIRD PART, WHICH IS AN OPPORTUNITY,
3 AND THAT'S THAT OUR GOOD FRIENDS AT CAL FIRE REALLY NEED
4 A CONSERVATION CAMP IN THIS PART OF THE STATE. THEY
5 DON'T HAVE THE RESOURCES THEY USED TO HAVE WHEN WE HAD
6 THE DJJ FACILITY. RIGHT NOW THEY DON'T HAVE ANY INMATES
7 TO USE EXCEPT OUT AT CMC. SO WE'RE HOPING TO MAKE
8 ENOUGH ROOM WITHIN THE PROPERTY TO PROVIDE A FULL
9 130-BED CONSERVATION CAMP JUST LIKE WE HAD IN THE SIERRA
10 AND OTHER PARTS OF THE STATE.
11 SO HERE'S THE PROPERTY. THERE IT IS. THAT'S
12 THE OLD DJJ FACILITY. THIS IS THE EXISTING CAL FIRE
13 FACILITY THAT'S ACTUALLY THEIR CAMP LESS THE HOUSING
14 UNITS AND KITCHEN FACILITIES. AND THIS IS WHERE WE PUT
15 OUR 500-BED SECURE REENTRY. AIRPORT'S OVER HERE. STATE
16 ROUTE 46 IS DOWN HERE. AIRPORT ROAD GOES UP THE EAST
17 SIDE OF THE FACILITY.
18 WE HAVE A COUPLE OF MINOR PLANS. WE'RE GOING
19 TO USE THIS LOWER TRIANGLE FOR HABITAT PROTECTION.
20 WE'RE GOING TO HAVE PARKING RIGHT HERE. WE DON'T HAVE A
21 LOT OF PLANS FOR THIS PART. IT HAS RESOURCE PROTECTION
22 ISSUES. SO THIS BECOMES OUR ESTRELLA ADULT CORRECTIONAL
23 FACILITY. THIS BECOMES THE CENTRAL COAST REENTRY. THIS
24 BECOMES SOMEDAY A FULL CAL FIRE CONSERVATION CAMP.
25 WHY DO WE NEED TO DO THIS? STATE OF

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1 CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION
2 HAS 33 PRISONS RIGHT NOW. THOSE PRISONS HAVE ABOUT
3 55,000 INMATES. THAT IS WELL OVER WHAT WE CALL THE
4 DESIGN CAPACITY FOR THOSE FACILITIES. A LOT OF THESE
5 FACILITIES ARE OPERATING AT HAVING EVERY CELL WITH TWO
6 INMATES IN IT AND THE LIBRARY AND A LUNCHROOM AND THE
7 GYMNASIUM FULL OF INMATES. THIS IS NOT A GOOD WAY TO
8 RUN FACILITIES. WE DO HAVE COURT CHALLENGES TO
9 OPERATION OF THE FACILITIES, WHICH WE HAVE TO TAKE INTO
10 CONSIDERATION MEDICAL, DENTAL, ACCESS COMPLIANCE. WE'RE
11 ABOUT TO HAVE AN OVERCROWDING ORDER THAT WILL SET US AT
12 ABOUT 140 PERCENT.
13 WE SEE THAT DJJ FACILITY AS A GREAT ECONOMIC
14 OPPORTUNITY. THE STATE ALREADY OWNS IT. IT'S ALREADY
15 ON THE TAX ROLLS. IT'S A REALLY GOOD FACILITY TO USE
16 FOR ADULT CORRECTIONAL. WE SEE THE PROPERTY AS A GREAT
17 PLACE FOR REENTRY BECAUSE WE HAVE THE PROPERTY FOR IT
18 AND WE HAVE A LOT OF INTEREST IN THE THREE COUNTIES WITH
19 REENTRY.
20 ALL OF THIS WILL BE FUNDED SOMEDAY OUT OF THE
21 AB900 2007 AUTHORITY WHICH PROVIDED FOR INFILL
22 CONSTRUCTION AND REENTRY AS WELL AS MEDICAL RECEIVER
23 BEDS. THIS IS THE SINGLE FUNDING SOURCE FOR THIS, AND
24 THIS HAS NOW BEEN DETERMINED TO BE A LEGAL SOURCE OF
25 FUNDS. WE'RE GOING THROUGH BUDGET PROCESS TO START THE

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1 CAPITAL PLANNING FOR THESE TWO PROJECTS RIGHT NOW.
2 WE'RE BACK OUT THERE OFF AIRPORT ROAD, PASO ROBLES.
3 WE'RE IN THE CITY LIMITS SO WE'RE WORKING VERY CLOSELY
4 WITH THE CITY.
5 FIRST PART, ONE MORE TIME. I WANT TO MAKE
6 SURE EVERYBODY KNOWS THIS. WE'RE TALKING ABOUT THE
7 ADVANTAGE OF THE OLD DJJ FACILITY IS THE HOUSING UNITS
8 WORK FOR THIS LOWER LEVEL SECURITY LEVEL TWO INMATE.
9 DORMITORIES. THEY JUST REALLY WORK WELL SO WE DON'T
10 HAVE TO MAKE MANY CHANGES. WE'RE PROPOSING TO BRING NO
11 MORE THAN 1,000 INMATES TO THAT FACILITY. THE BALANCE
12 OF THEM BEING LEVEL TWO, WHICH OUT OF FOUR LEVELS OF
13 SECURITY IT'S THE SECOND LOWEST.
14 WE'RE ALSO GOING TO BRING IN SOME SUPPORT
15 INMATES, LEVEL ONE INMATES THAT WOULD HELP RUN THE
16 FACILITY. PROBABLY WHEN THE DAY'S DONE WE'LL HAVE ABOUT
17 500 PLUS NEW STAFF BACK OUT THERE. THREE WATCHES, SEVEN
18 DAYS A WEEK, 24 HOURS A DAY. WE HAVE A CONSTRUCTION
19 BUDGET OF ABOUT 110 MILLION, SO THERE WILL BE BOTH
20 LONG-TERM ECONOMIC ADVANTAGE TO THE COMMUNITY PLUS THE
21 SHORT-TERM CONSTRUCTION DOLLARS.
22 WE'LL BE CHANGING THE FENCE. WE LOVE FENCING
23 AT THE DEPARTMENT OF CORRECTIONS. WE LOVE FENCING AND
24 GATES AND TOWERS. SO WE'RE GOING TO TAKE WHAT WAS THE
25 PERFECTLY GOOD FACILITY THAT DAVE RAN AND WE'RE GOING TO

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1 ADD OUR STANDARD PERIMETER SECURITY SYSTEM WHICH IS TWO
2 FENCES WITH A LETHAL ELECTRIC FENCE IN BETWEEN THEM. SO
3 WE HAVE TO ADD SOME FENCING. WE HAVE TO DO SOME MINOR
4 MODIFICATIONS TO THE FACILITY. WE HAVE TO ADD TWO
5 OBSERVATION TOWERS, ONE FOR THE PEDESTRIANS AND ONE FOR
6 THE VISITOR AND VEHICULAR TRAFFIC.
7 WE HAVE A REALLY GOOD CLINIC AT THE FACILITY,
8 AND WE THINK THIS CLINIC WILL WORK WELL FOR OLDER
9 INMATES THAT WE TEND TO BRING THERE WHICH DON'T HAVE
10 ACUTE MEDICAL NEEDS, JUST SORT OF STANDARD OUTPATIENT
11 TYPE NEEDS. OUTPATIENT BEING THEY DON'T GET TO LEAVE.
12 THEY GO DOWN TO THE FACILITY. WE HAVE THIS IN THE BACK.
13 THIS IS THE DETAIL. AND WHAT'S INTERESTING IS WE HAVE
14 ALL OF THESE GREAT HOUSING UNITS THAT ARE READY TO GO.
15 WE JUST HAVE TO PUT NEW ROOFS ON THEM. THEY'RE IN GOOD
16 SHAPE.
17 WE HAVE OUR TRADITIONAL 270 WHICH IS A CELL
18 HOUSING UNIT WHICH IS JUST NICE TO HAVE. WE HAVE A NICE
19 NEW CLINIC. BUT WE WOULD HAVE TO PUT A NEW PERIMETER
20 AROUND THE FACILITY. WE DO LOSE SOME TREES ALONG THE
21 WAY, WHICH GARY IS GOING TO TALK ABOUT BECAUSE OF THE
22 WAY THIS WORKS. THE VISITOR ENTRANCE IS ON THE WEST
23 SIDE IN THE FUTURE.
24 I WANT TO MAKE SURE YOU UNDERSTAND WHAT A
25 SECURE COMMUNITY REENTRY FACILITY IS. WE DON'T HAVE ANY

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1 YET, BUT AB900 AUTHORIZES THEM. AND THE IDEA IS THAT WE
2 DO HAVE A TERRIBLE PROBLEM IN CALIFORNIA AND OTHER
3 STATES TOO WHERE INMATES DON'T COME TO US WITH GOOD
4 EDUCATIONS AND GOOD JOB SKILLS. THAT'S MAYBE HOW THEY
5 GOT TO WHERE THEY ARE. BUT AFTER YOU SPEND 10 YEARS IN
6 A LOCKUP WITH VERY LITTLE OPPORTUNITY FOR MUCH OF
7 ANYTHING BECAUSE IT'S OVERCROWDED, YOU COULD WELL BE
8 PAROLED. AND 85 TO 90 PERCENT OF OUR INMATES WILL
9 EVENTUALLY PAROLE.
10 THEY'RE NOT READY FOR THE STREET, AND IT'S
11 PROVEN BY THE FACT HOW QUICKLY THEY REOFFEND AND TEND TO
12 COME BACK INTO THE SYSTEM WITH A NEW CONVICTION OR A
13 REVOCATION OF PAROLE. WE WOULD LIKE TO BUILD
14 FACILITIES -- AND THIS IS ONE EXAMPLE OF THAT -- WHERE
15 THEY GET THEIR LAST 12 MONTHS OF INCARCERATION. THEY
16 GET AN INTENSE FACILITY DEDICATED TO THEM ONLY. 500,
17 NOT OVERCROWDED WITH TEACHERS AND MEDICAL STAFF AND
18 VOCATIONAL EDUCATION STAFF THAT CAN HELP THEM BE MORE
19 PREPARED TO COME OUT ON THE STREET.
20 THESE FACILITIES WOULD NOT BE OPERATED ABOVE
21 500 BEDS. THEY JUST CAN'T BE. THEY ARE DIFFERENT IN
22 THAT THEY DON'T HAVE THE SAME FENCE THAT YOU SEE IN THE
23 OTHER FACILITY BUT IT IS JUST AS SECURE. WE'RE REALLY
24 EXCITED ABOUT THIS. WE HAVE TWO PARTNERS HERE TONIGHT
25 THAT I'M GOING TO ASK TO SAY A FEW WORDS ABOUT REENTRY.

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1 WE JUST THINK THIS IS GOING TO BE A GOOD IDEA. WHEN YOU
2 SEE INMATES COMING OUT NOW, SURELY SOME VOCATIONAL
3 TRAINING AND SOME EDUCATIONAL OPPORTUNITIES HAVE GOT TO
4 PUT THEM IN A BETTER SPOT.
5 THIS FACILITY IS DESIGNED TO ADDRESS THE
6 PAROLE NEEDS FOR THREE COUNTIES. SANTA BARBARA, SAN
7 LUIS OBISPO, AND SAN BENITO HAVE COME TOGETHER TO BE OUR
8 SHARED OPERATORS AND PARTICIPANTS BECAUSE THESE ARE ONLY
9 FOR THESE COUNTIES THAT ARE HAVING PAROLEES COME BACK.
10 THEY ARE NOT FOR THE OTHER COUNTIES IN THE STATE. SAN
11 LUIS OBISPO COUNTY GETS ABOUT 60 INMATES, PAROLEES A
12 MONTH. SO IT HAS A FLOW OF INMATES COMING OUT. IDEALLY
13 A PORTION OF THOSE WILL GET TO GO THROUGH THIS FACILITY.
14 SANTA BARBARA HAS A LOT COMING OUT. SAN BENITO HAS
15 FEWER, BUT THEY ALL HAVE THEM.
16 WE HAVE REPRESENTATIVES FROM SANTA BARBARA AND
17 SAN LUIS OBISPO. DO YOU WANT TO SAY A FEW WORDS?
18 COMMANDER THOMAS JENKINS: I'M COMMANDER TOM
19 JENKINS FROM THE SANTA BARBARA COUNTY SHERIFF. SANTA
20 BARBARA IS REALLY EXCITED ABOUT PARTNERING WITH THE CITY
21 OF PASO ROBLES, SAN BENITO, AND SAN LUIS OBISPO COUNTY
22 ON REENTRY. WE WERE ACTUALLY VERY EARLY IN THE PROCESS
23 OF CDC'S REENTRY THOUGHT PROCESS. WE WERE LOOKING
24 FORWARD TO HAVING A FACILITY IN OUR COUNTY. IT JUST
25 DIDN'T QUITE WORK OUT FOR US. BUT WE'RE EXCITED TO

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1 PARTICIPATE. WE KNOW IT WILL WORK. WE KNOW IT WILL
2 MAKE OUR COMMUNITY SAFER. AND I'M HERE TO ANSWER ANY
3 QUESTIONS AS TO WHY WE PARTNERED DIRECTLY WITH SAN LUIS.
4 WE APPRECIATE THEM BEING A PART OF THIS AND ALLOWING US
5 TO BE PART OF IT.
6 CHIEF DEPUTY REID: HI THERE. MY NAME IS
7 ROB REID. I'M CHIEF DEPUTY WITH THE SHERIFF'S
8 DEPARTMENT HERE IN SAN LUIS OBISPO COUNTY. WE'RE VERY
9 COMMITTED TO THE IDEA OF REENTRY AND THIS REENTRY
10 FACILITY. WE LOOK AT EVERY INMATE OR PAROLEE WHO LEAVES
11 THE STATE SYSTEM THAT ENDS UP COMING BACK TO THE STATE
12 SYSTEM THROUGH RECIDIVISM. THEY COME THROUGH A COUNTY
13 JAIL. SO REDUCING THAT RECIDIVISM WILL REDUCE THE
14 POPULATIONS IN THE COUNTY JAILS TO START WITH. AND THAT
15 DOESN'T JUST SAVE THE COUNTY SOME MONEY. IT SAVES THE
16 STATE MONEY. IT SAVES THE COUNTY BUT IT ALSO SAVES THE
17 TAXPAYERS. SO WE'RE VERY COMMITTED TO THIS REENTRY
18 FACILITY.
19 DIRECTOR SLEPPY: THANK YOU VERY MUCH. THIS
20 IS WHAT'S GOING TO GO OUTSIDE. THIS IS REALLY A SECURE
21 FACILITY. IT HAS ALL THE PRISON-LIKE QUALITIES IN TERMS
22 OF CUSTODY AND PERIMETER SECURITY, BUT IT IS DEVOTED TO
23 PROGRAMMING, GETTING PEOPLE READY TO LEAVE. AND IT'S
24 EXCLUSIVELY FOR THESE THREE COUNTIES, NOT OTHERS. THIS
25 IS THE WAY THE LAW WAS WRITTEN AND THAT'S THE WAY IT

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1 WILL BE.
2 THIS IS OUR FIRST PROPOSED STAND-ALONE. WE
3 HAVE ANOTHER ONE PROPOSED FOR THE ONE IN STOCKTON AT A
4 CLOSED MEN'S FACILITY. WE HAVE FOUR MORE WE'RE WORKING
5 ON IN THE STATE AND IN OTHER COUNTIES. WE WOULD LIKE
6 THESE TO LOOK URBAN. WE DON'T WANT THEM TO LOOK LIKE A
7 PRISON BOTH FOR THE FOLKS COMING INTO THEM AND FOR THE
8 FOLKS LIVING NEXT TO THEM. THIS WILL BE PARTICULARLY
9 VISIBLE. WE'VE DISTINCTLY MADE THESE APPEALING. MORE
10 JAIL-LIKE IN TERMS OF THEIR APPEARANCE.
11 THESE ARE ABOUT A $150 MILLION CONSTRUCTION
12 BUDGET. THESE ALSO HAVE PROBABLY 400 TO 500 STAFF. SO
13 IN TOTAL WE'RE BRINGING 800 TO 900 STAFF POTENTIAL OUT
14 TO THIS PROPERTY. ALL THE SAME INTERIOR BUILDINGS.
15 THIS IS A DIFFERENT EXTERIOR.
16 FIRE CAMP. WE HAVE A UNIQUE OPPORTUNITY, AT
17 LEAST WE THINK WE DO. IN THE OLD DAYS WHEN DAVE WAS
18 RUNNING HIS GREAT FACILITY FOR THE JUVENILE JUSTICE
19 SYSTEM, WE HAD WARDS COME OUT AND GO ON FIRE CREWS AND
20 MAINTENANCE CREWS. THEY LIVED AT THE PASO ROBLES
21 FACILITY. THEY CAME OVER AND GOT PICKED UP BY CAL FIRE
22 BY JENKINS' STAFF AND TAKEN OUT. WE LOST THAT OPTION
23 WHEN DJJ LOST THAT. THE SAME THING IS HAPPENING IN THE
24 OTHER PARTS OF THE STATE.
25 WE ARE ALL TRYING TO PROVIDE A CHANCE TO BRING

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1 LEVEL-ONE INMATES WHICH ARE MINIMUM SECURITY INMATES TO
2 COME OUTSIDE THE PERIMETER AND DO WORK AND REPLACE WHAT
3 WE USED TO HAVE FOR WARDENS. WE ARE TRYING TO DO THIS
4 UNDER TWO SCHEMES. THE FIRST SCHEME IS THAT THE
5 FACILITY ITSELF WILL HAVE A LEVEL-ONE CREW TO PROVIDE
6 MAINTENANCE. AND WE'RE HOPEFUL TO BRING SOME OF THOSE
7 TO SHARE AND BE CONSERVATION CREW MEMBERS THAT CAL FIRE
8 WOULD TAKE OUT.
9 AND THEN SOMEDAY -- THEY ARE ACTUALLY TRYING
10 TO GET THEIR CONSTRUCTION MONEY TOO -- THERE'S ROOM TO
11 BUILD A FULL STAND-ALONE, 130-BED CONSERVATION CAMP. SO
12 THERE WOULD BE AN ADDITIONAL 130 LOW-LEVEL INMATES THAT
13 COULD GO OUT TO FIRES AND GO OUT TO CONSERVATION
14 PROJECTS LOCALLY. THERE'S ROOM TO BUILD IT AT THE BACK
15 OF THE FACILITY. WE'RE GOING TO WORK WITH THEM. IT'S A
16 TOP PRIORITY FOR CAL FIRE TO BUILD A CAMP HERE.
17 I'D LIKE TO INTRODUCE MATT JENKINS WHO'S THE
18 FIRE CHIEF OF SAN LUIS OBISPO COUNTY, CAL FIRE. HE'S
19 GOT A GREAT SPEECH ABOUT THE NEED FOR THIS.
20 CHIEF MATT JENKINS: I THINK YOU JUST MADE MY
21 CASE FOR THIS ALREADY. AGAIN, MATT JENKINS, CHIEF FOR
22 CAL FIRE AND COUNTY FIRE. AND AS BOB SAID, WE DID RUN A
23 CONSERVATION CAMP STAFFED WITH WARDENS OUT AT THE BOYS
24 SCHOOL. WE HAD THREE FACILITIES IN OUR AREA, TWO BEING
25 IN THIS COUNTY, THIS ONE IN PASO ROBLES. WE HAVE ONE AT

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1 CAMP SAN LUIS OBISPO CALLED CUESTA CAMP THAT RUNS WITH
2 INMATES OUT OF THE MEN'S COLONY. AND WE HAVE A THIRD IN
3 VENTURA COUNTY THAT RUNS WITH YOUTH WARDS.
4 THE CLOSURE OF THE LOS ROBLES CAMP DUE TO LACK
5 OF WARDS WAS A PRETTY DEVASTATING BLOW TO THE FIRE
6 SERVICES. WE LOST OVER 120 FIREFIGHTERS. THESE CREWS
7 ARE BOOTS ON THE GROUND, ARE FOLKS THAT DO THE HARD WORK
8 CUTTING THE FIRE LINE. AND THEY ALSO WHEN THEY'RE NOT
9 FIGHTING FIRES DO CONSERVATION PROJECTS CLEARING BRUSH
10 AROUND PUBLIC FACILITIES, AROUND SUBDIVISIONS, CLEARING
11 CREEKS FOR FLOODING. THEY SANDBAG. THEY HELP IN
12 EARTHQUAKES. SO LOSING THOSE FIVE CREWS WAS A PRETTY
13 SERIOUS BLOW.
14 WITH THE DECLINING WARD POPULATION WE'VE LOST
15 A NUMBER OF OUR CREWS IN VENTURA AS WELL. WE'RE
16 ALLOCATED FOR 14 CREWS TO PROTECT THE ENTIRE CENTRAL
17 COAST FROM SOUTHERN MONTEREY COUNTY DOWN TO VENTURA.
18 WE'RE DOWN TO 7 NOW. IT'S REALLY TAKEN ITS TOLL ON US.
19 WE CAN SEE IT ON OUR FIRES.
20 SO WE'RE PRETTY EXCITED ABOUT THIS PROJECT,
21 THE POSSIBILITY OF REACTIVATING THE LOS ROBLES CAMP
22 INITIALLY HOUSING OUR LEVEL-ONE INMATES IN THE
23 INSTITUTION AND RUNNING OUR CREWS WITH OUR EXISTING
24 FACILITIES WHILE WE'RE GETTING OUR PLANS TOGETHER TO
25 CONSTRUCT A STAND-ALONE FACILITY, AND ULTIMATELY THAT'S

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1 THE GOAL OF BOTH AGENCIES. IT WILL CREATE A 130 EXTRA
2 BEDS AND MAKE THOSE CREWS READY FOR IMMEDIATE RESPONSE
3 RATHER THAN HAVING TO GO THROUGH A RATHER COMPLICATED
4 CHECKOUT PROCESS TO GET THEM SECURELY IN AND OUT AND GET
5 THE RIGHT PEOPLE OUT AND THE RIGHT PEOPLE BACK IN AGAIN.
6 SO AGAIN, I'LL SAY WE'RE VERY EXCITED ABOUT SEEING THIS
7 PROJECT GO FORWARD AND GETTING THE FIRE CAMP BACK ON
8 LINE.
9 DIRECTOR SLEPPY: THANK YOU. WE HAVE TO DO
10 THIS STUFF OUT THERE AND WE HAVE TO FIGURE OUT UTILITY
11 UPGRADES, ROADS, HOW TO GET ENTRANCE. WE'RE GOING TO
12 HAVE TO PROPOSE A HABITAT RESTORATION OUT IN THE
13 SOUTHWEST CORNER BECAUSE WE WILL LOSE SOME TREES. THE
14 MASTER PLAN WAS AN IDEA THE CITY PUT FORTH. THEY WANTED
15 TO KNOW ALL THE THINGS WE MIGHT DO ON THIS PROPERTY. SO
16 THAT'S WHY WE'RE DOING ALL THESE PROJECTS IN ONE
17 ENVIRONMENT IMPACT REPORT. ALTHOUGH ALL THREE ARE
18 PRETTY VIABLE FOR CONSTRUCTION.
19 WE'RE ACTUALLY HERE TO TALK ABOUT THE START OF
20 PREPARING AN ENVIRONMENTAL IMPACT REPORT. THE STATE IS
21 COMPELLED TO DO A REPORT THAT TALKS ABOUT WHAT THE
22 POTENTIAL NEGATIVE EFFECTS WOULD BE OF BUILDING THIS AND
23 ALTERNATIVES TO IT AND THE MITIGATION. WE GO THROUGH A
24 PROCESS OF STARTING THIS CALLED PREPARATION. GARY'S
25 COMPANY IS GOING TO PRODUCE A DRAFT ENVIRONMENTAL IMPACT

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1 REPORT WHICH DESCRIBES ALL THESE THINGS, AND THE PUBLIC
2 IS TO COMMENT AND REVIEW THAT WITHIN 45 DAYS, SOME
3 MONTHS FROM NOW. WE'LL HAVE PUBLIC HEARINGS LIKE THIS
4 DURING THAT PROCESS.
5 WE THEN PRODUCE A DOCUMENT THAT RESPONDS TO
6 ALL THOSE COMMENTS. SO IF SOMEBODY SAYS WE DIDN'T COUNT
7 THE TREES RIGHT, WE'LL SEE IF WE CAN COUNT THE TREES
8 RIGHT AND WE COME TO MAKING A DECISION OF WHETHER OR NOT
9 TO DO ONE OR THREE OR TWO OF THESE DIFFERENT PROJECTS ON
10 THE PROPERTY. THAT'S WHAT GETS US INTO THE NEXT STEP OF
11 FORMAL CONSTRUCTION, AWARD AND ACTUAL CONSTRUCTION OF
12 THESE FACILITIES.
13 WE ARE GOING TO HAVE GARY JAKOBS TALK ABOUT
14 WHAT WE BELIEVE WE KNOW HAS TO BE ADDRESSED IN THE EIR.
15 WE ARE WORKING WITH THE CITY OF PASO ROBLES ON THE
16 ENVIRONMENTAL CONSEQUENCES. HE'S GOING TO RUN DOWN THAT
17 LIST A LITTLE BIT. THIS IS IMPORTANT TO GET THE SCOPE
18 RIGHT AT THE BEGINNING OF THE PROCESS. SO THERE'S THE
19 SCHEDULE. SO I'M GOING TO HAND THIS OVER TO MR. JAKOBS.
20 MR. JAKOBS: THANK YOU, BOB.
21 GOOD EVENING AND THANK YOU FOR HAVING US HERE
22 TONIGHT. I WILL TALK ABOUT THE ISSUES THAT WE'RE GOING
23 TO ADDRESS IN THE ENVIRONMENTAL IMPACT REPORT AND I WILL
24 DO MY BEST TO BE BRIEF. WE'RE JUST AT THE START RIGHT
25 NOW. SO THE PROCESS TONIGHT IS AN IMPORTANT PART OF THE

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1 ENVIRONMENTAL IMPACT REPORT, THE NOTICE OF PREPARATION,
2 AND RESPONSES ON THAT DOCUMENT THAT'S OUT ON THE STREET
3 RIGHT NOW THAT ANNOUNCES THAT WE'RE PREPARING AN
4 ENVIRONMENTAL IMPACT REPORT. IT'S ALSO VERY IMPORTANT.
5 SO WHAT WE HEAR TONIGHT WILL HELP FORM THE ENVIRONMENTAL
6 IMPACT REPORT. AND NANCY MACKENZIE BACK THERE HAS EXTRA
7 COPIES OF THE NOTICE OF PREPARATION IF YOU WANT TO SEE
8 THAT.
9 WHAT WILL THE ENVIRONMENTAL IMPACT REPORT
10 EVALUATE? IT WILL LOOK AT THE IMPACTS OF THIS PROJECT
11 ON THE ENVIRONMENT, ON THE PHYSICAL ENVIRONMENTAL
12 CONDITIONS OUT AT THE PROJECT SITE AND IN THE
13 SURROUNDING AREA. THAT'S THE JOB OF AN EIR. IT'S NOT
14 TO LOOK AT SOCIAL ISSUES. SOCIAL ISSUES ARE NOT PART OF
15 THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, ALTHOUGH
16 CERTAINLY THEY ARE ISSUES THAT COME UP AS WE ARE
17 ADDRESSING PROJECT IMPACTS.
18 WE'LL BE LOOKING AT ALL THREE OF THE
19 FACILITIES THAT ARE PROPOSED, THE CAL FIRE FACILITY, THE
20 REENTRY FACILITY, AND THE REUSE OF THE ESTRELLA FACILITY
21 IN OUR EIR. AND WE'LL EVALUATE THE IMPACTS AT THE LEVEL
22 OF DETAIL THAT WOULD ALLOW THE DEPARTMENT OF CORRECTIONS
23 TO DECIDE WHETHER OR NOT TO MOVE FORWARD WITH THE
24 PROJECT BASED ON AT LEAST ITS ENVIRONMENTAL IMPACTS.
25 THIS IS A LIST OF SOME OF THE ISSUES WE'RE

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1 GOING TO ADDRESS. WE'LL BE LOOKING AT AIR QUALITY,
2 CLIMATE CHANGE, GREENHOUSE GAS EMISSIONS. AND IN
3 LOOKING AT CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS,
4 WE'LL BE LOOKING AT ENERGY AND THE USE OF ENERGY AT THE
5 PROJECT SITE AS THAT ALL RELATES TO THESE ISSUES. WE'LL
6 BE LOOKING AT BIOLOGICAL RESOURCES. WHAT ARE WE GOING
7 TO BE EVALUATING? THERE ARE POSSIBLE REMNANT WETLANDS
8 ON THE PROJECT THAT WE WILL BE EVALUATING.
9 AS BOB SAID, A LETHAL ELECTRIFIED FENCE IS
10 BEING PROPOSED. AND THE FENCE IS VERY GOOD AT KEEPING
11 PEOPLE IN THE PRISON, BUT IT IS LETHAL. AND WE'VE BEEN
12 MONITORING THE FENCE FOR SEVERAL YEARS IN CASES
13 THROUGHOUT THE STATE, AND THEY KILL BIRDS AND OTHER
14 WILDLIFE THAT HAPPENS TO FIND THEIR WAY INTO BETWEEN THE
15 TWO PERIMETERS OF THE FENCE. SO WE'LL BE LOOKING AT
16 IMPACTS ASSOCIATED WITH THAT.
17 AS A RESULT SOME OF WHAT WE HAVE FOUND OVER
18 THE YEARS IS THAT VEGETATION, TREES, THINGS LIKE THAT
19 THAT ATTRACT BIRDS ARE THINGS TO AVOID NEAR THE
20 ELECTRIFIED FENCE. SO BECAUSE THE PROJECT CURRENTLY HAS
21 SOME TREES THAT COULD BE ATTRACTIVE TO BIRDS, SOME OF
22 THOSE TREES WILL NEED TO BE REMOVED AS PART OF THE
23 PROJECT. SO WE'LL EVALUATE THE IMPACTS OF REMOVING
24 THOSE TREES TOO. SO IT WILL BE A VERY COMPREHENSIVE
25 DISCUSSION.

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1 WE'LL BE LOOKING AT CULTURAL RESOURCES. THESE
2 ARE ARCHAEOLOGICAL AND HISTORIC RESOURCES THAT WOULD BE
3 AFFECTED. TRANSPORTATION AND TRAFFIC, IN PARTICULAR WE
4 WILL BE LOOKING AT AIRPORT ROAD. AIRPORT ROAD DOES GET
5 SOME CONGESTION AT ITS INTERSECTION WITH HIGHWAY 46.
6 WE'LL BE LOOKING AT PLANS FOR THE ULTIMATE USE OF
7 AIRPORT ROAD AND HOW THIS PROJECT WILL FIT IN AS WELL AS
8 HIGHWAY 46 AND U.S. 101. WE'LL BE LOOKING AT THAT
9 INTERSECTION AND OTHER INTERSECTIONS THAT COULD BE
10 AFFECTED BY THE PROJECT.
11 HYDROLOGY, STORM DRAINAGE, AND FLOOD CONTROL
12 WILL BE STUDIED AS WILL VISUAL RESOURCES, LIGHT AND
13 GLARE. WITH VISUAL RESOURCES, LIGHT AND GLARE, WE KNOW
14 THAT THIS AREA IS IMPORTANT TO THE CITY. IT'S HIGHLY
15 VISIBLE. SO WE'LL BE LOOKING AT KEY VIEWPOINTS OF THE
16 PROJECT SITE, WHAT THE IMPACTS OF THE PROJECT ARE ON
17 THESE VIEWPOINTS, AND IF THERE ARE ANY SIGNIFICANT
18 EFFECTS HOW WE MIGHT BE ABLE TO MODIFY THE VIEWS SO THAT
19 AESTHETIC TREATMENTS ARE PROVIDED TO AT LEAST ENHANCE TO
20 A DEGREE POSSIBLE WHAT WE SEE.
21 LAND USE AND PLANNING WILL CERTAINLY BE
22 EVALUATED AND AGRICULTURAL RESOURCES. WE'LL BE LOOKING
23 AT GEOLOGY, SOILS, SEISMICITY, MINERAL RESOURCES. WE'LL
24 BE LOOKING AT HAZARDS, HAZARDOUS MATERIALS. WE'LL BE
25 LOOKING AT PUBLIC HEALTH EFFECTS.

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1 OTHER ISSUES THAT WILL BE EVALUATED, NOISE.
2 WE'LL BE LOOKING AT EMPLOYMENT POPULATION AND HOUSING.
3 PEOPLE WILL BE MOVING INTO THE AREA, PARTICULARLY
4 CORRECTIONAL OFFICERS. THERE WILL BE NEW OFFICERS THAT
5 WILL BE MOVING INTO THE AREA AND THEIR FAMILIES WILL BE
6 MOVING TO THE AREA TOO. I WANT TO SAY NOW WHILE WE'RE
7 SITTING AT THE TABLE, THE ISSUE OF WHAT ABOUT INMATE
8 FAMILIES? WON'T THEY BE MOVING TO THE AREA TOO? AND
9 CERTAINLY THAT'S AN ISSUE THAT WE HEAR A LOT OF. SO AT
10 LEAST WE WILL EXPLAIN WHAT WE KNOW ABOUT THAT AND WHAT
11 THE EFFECTS COULD BE ON HOUSING AND COMMUNITY SERVICES.
12 WE'LL ALSO BE EVALUATING UTILITIES, WATER USE.
13 GROUNDWATER IS AN IMPORTANT ISSUE HERE. THE FACILITY'S
14 BEEN ON GROUNDWATER FOR AN AWFUL LONG TIME. THERE'S
15 ALSO NEW WINERIES IN THE AREA AND THEY'RE USING
16 GROUNDWATER AND THERE'S A LOT OF COMPETITION ON THAT.
17 SO WE'LL BE EVALUATING THE IMPACTS OF THAT. WE'LL ALSO
18 LOOK AT SEWAGE, THE CITY'S SEWAGE CAPACITY AND HOW THE
19 PROJECT MIGHT AFFECT THAT AS WELL AS OTHER UTILITIES.
20 WITH REGARD TO RECREATION, AS PEOPLE MOVE INTO
21 AN AREA, WE'RE NOT GOING TO BE LOOKING AT RECREATION
22 IMPACTS FROM THE INMATES. THEY'RE GOING TO BE STAYING
23 IN THE FACILITY. BUT WE WILL BE LOOKING AT RECREATION
24 IMPACTS IN THE COMMUNITY ASSOCIATED WITH PEOPLE MOVING
25 IN, CORRECTIONAL OFFICERS AND THEIR FAMILIES MOVING INTO

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1 THE COMMUNITY, AND HOW THAT COULD AFFECT RECREATIONAL
2 RESOURCES IN PASO ROBLES AND THE SURROUNDING AREA.
3 GROWTH AND CUMULATIVE IMPACTS. WE'LL BE
4 LOOKING AT WHETHER THE PROJECT WILL CAUSE GROWTH IN THE
5 COMMUNITY AND WHAT THE IMPACTS OF THAT GROWTH MIGHT BE.
6 FINALLY CUMULATIVE IMPACTS. THESE ARE THE IMPACTS OF
7 THE PROJECT IN COMBINATION WITH OTHER PROJECTS THAT
8 MIGHT BE PROPOSED AT THE SAME TIME THAT TOGETHER COULD
9 RESULT IN GREATER IMPACTS. SO THAT WILL BE EVALUATED
10 TOO. THAT'S A SUMMARY OF WHAT THE EIR WILL BE ABOUT.
11 DIRECTOR SLEPPY: OKAY. THIS IS THE PART
12 WHERE YOU ALL GET TO COME UP AND SAY A FEW WORDS. YOU
13 DON'T HAVE TO GET UP. IF YOU'D LIKE TO STAY AFTERWARDS
14 AND DICTATE SOME COMMENTS TO OUR COURT REPORTER, THAT'S
15 FINE. YOU CAN SEND US A LETTER HANDWRITTEN OR TYPED
16 WITH YOUR CONCERNS. BUT THIS IS A GOOD CHANCE TO GET UP
17 AND TALK ABOUT YOUR CONCERNS, YOUR THOUGHTS ON THE EIR.
18 A COUPLE THINGS I WANT TO MAKE SURE EVERYBODY
19 IS REAL AWARE OF. WE HAVE BEEN ASKED THIS SEVERAL TIMES
20 BY THE CITY. WE'RE ONLY TALKING ABOUT A LEVEL-TWO ADULT
21 POPULATION AT THIS PRISON, AND THAT'S BECAUSE OF THE
22 TYPE OF HOUSING THAT WE HAVE HAD AT THE OLD DJJ
23 FACILITIES. THIS WOULD NOT BE A HIGHER SECURITY
24 LEVEL-THREE OR FOUR PRISON.
25 NUMBER TWO, WE EMBRACE THIS PLANNING PROCESS.

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1 WE HAVEN'T MADE A DECISION YET TO DO THIS. THE LAW
2 COMPELS US TO GO THROUGH THIS PROCESS AND WE WANT TO DO
3 THAT. THE DEPARTMENT IS VERY CONSCIENTIOUS IN THAT
4 PROCESS. WE HOPE THAT EVENTUALLY IF THIS PROJECT IS
5 SUCCESSFUL AND APPROVED, IT WILL BRING A LOT OF JOBS TO
6 TOWN AND SHORT-TERM CONSTRUCTION DOLLARS. AND WE HOPE
7 TO BE A GOOD NEIGHBOR, WHICH THE DJJ CERTAINLY WAS FOR
8 40, 50 YEARS.
9 SO WITH THAT IF SOMEONE WOULD LIKE TO GET UP
10 AND SAY A FEW WORDS OR WE'LL STICK AROUND AFTERWARDS IF
11 YOU WANT TO TALK TO US ONE ON ONE. WE HAVE EVERY
12 RESOURCE HERE. I'D ALSO LIKE TO ACKNOWLEDGE IT'S SO
13 FORTUNATE TO HAVE OUR REPRESENTATIVE FROM CAL FIRE AND
14 JIM AND DAVE BACK THERE WHO ARE CONSTANTLY HELPFUL TO US
15 REGARDLESS OF BEING UP AT NEW PRISON ASSIGNMENTS. SO WE
16 HAVE A GOOD TEAM HERE. THANK YOU. ANYBODY WANT TO
17 TALK? SAY YOUR NAME WOULD BE GOOD.
18 MS. KATHY BARNETT: MY NAME IS KATHY BARNETT.
19 I'M A PASO ROBLES RESIDENT. I THINK SO MANY PEOPLE COME
20 IN REGARDS TO PROTECTING THEIR JOBS. IT DOESN'T SAY A
21 WHOLE LOT OF POSITIVE FOR OUR CITY TONIGHT THAT THERE
22 AREN'T VERY MANY MEMBERS OF OUR CITY HERE ON SUCH AN
23 IMPORTANT MATTER. HOWEVER, I DON'T BELIEVE THAT OUR
24 MEDIA, EITHER THE PASO ROBLES PRESS OR THE TRIBUNE, DID
25 US ANY FAVOR BECAUSE THERE WAS LITTLE NOTIFICATION OF

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1 THIS MEETING.
2 HAVING SAID THAT, THOUGH, I CAN'T SAY THAT I'M
3 IN FAVOR OF THIS PROJECT. HOWEVER, I'VE COME TO ENOUGH
4 CITY PLANNING THINGS THAT THERE'S OTHER THINGS I'M NOT
5 IN FAVOR OF AND LIFE GOES ON. I FIGURE LIFE WILL
6 CONTINUE ON AFTER THIS PRISON STARTS. BUT I WOULD LIKE
7 TO ASK A COUPLE OF QUESTIONS HAVING TO DO WITH THE
8 ENVIRONMENTAL IMPACT.
9 NUMBER ONE, PASO ROBLES RIGHT NOW HAS AN ISSUE
10 HAVING TO DO WITH WATER. WATER IS OF EXTREME IMPORTANCE
11 TO THIS CITY AND THERE'S A LOT OF DISAGREEMENT GOING ON
12 RIGHT NOW. I WANT TO KNOW WHETHER YOU INTEND TO USE OR
13 HAVE ACCESS TO OUR NACIMIENTO WATER PROJECT. I KNOW IT
14 STATES IN YOUR INFORMATION THAT YOU HAVE TWO WELLS OUT
15 THERE. HOWEVER, TO THE EAST IN THE ESTRELLA AREA, WELLS
16 HAVE BEEN GOING DRY. IN SPITE OF PEOPLE DRILLING
17 FURTHER AND FURTHER DOWN, IT'S STILL A DRY AREA.
18 SOMETHING ELSE, I FREQUENTLY LEAVE THE CITY
19 AND COME BACK IN FROM ALL THE DIFFERENT AREAS, NORTH,
20 SOUTH AND COME IN FROM THE EAST. ONE OF THE THINGS THAT
21 I'M NOT ANXIOUS TO COME INTO PASO ROBLES IS TO GLARING
22 LIGHTS. AND I'D LIKE TO KNOW IF THERE'S ANYTHING NEW
23 OUT THERE ON THE MARKET IN WHICH YOU COULD MEDIATE FOR
24 OUR NIGHT SKY. OUR NIGHT SKY HERE IN PASO ROBLES IS ONE
25 OF THE LAST AREAS IN WHICH WE HAVE WHAT'S CALLED A NIGHT

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1 SKY AND CAN SEE THE STARS.
2 I WOULD VERY MUCH LIKE IF SOMEHOW LIGHTS COULD
3 BE FOCUSED DOWNWARD OR LOOK INTO, SAY, THE NEW KINDS OF
4 LIGHTING. SAY OTHER PLACES THAT YOU GO, I'VE BEEN TO
5 ENOUGH PLACES WHERE YOU TRAVEL ON THE HIGHWAY YOU KNOW
6 IMMEDIATELY THAT YOU'RE BY A PRISON. I WOULD PREFER
7 PEOPLE RECOGNIZE PASO ROBLES FOR OAK TREES THAN THE
8 NIGHT SKY BEING DISTURBED BY GLARING LIGHTS FROM A
9 PRISON.
10 I'M ALSO CURIOUS, AND MAYBE THIS PROBABLY
11 DOESN'T HAVE TO DO WITH THE ENVIRONMENTAL IMPACT REPORT.
12 MAYBE HAD NOTHING TO DO WITH THIS AT ALL BY THIS POINT
13 IN TIME. BUT ON THIS SHEET WHERE YOU HAVE ALL THE
14 COLORS AND NUMBERS AND SO FORTH, ESSENTIALLY WHAT IT
15 SHOWS US IS THAT OUR COUNTY IS GETTING A HALF MILLION
16 DOLLARS MORE THAN SANTA BARBARA. HOWEVER, IF I'M
17 READING THESE NUMBERS RIGHT, SANTA BARBARA WILL PROBABLY
18 SEND MORE PRISONERS HERE.
19 I DON'T UNDERSTAND, I GUESS, WHY OTHER THAN I
20 KNOW THAT THERE WAS NEGOTIATIONS FOR A WOMEN'S PRISON
21 DEVELOPMENT, THIS SORT OF THING. I SURE WISH THERE WAS
22 MORE MONEY, THOUGH, COMING INTO SAN LUIS OBISPO COUNTY
23 IN REGARDS TO THIS PROJECT. I DON'T THINK THAT JUST
24 BECAUSE WE GET JOBS THAT THAT'S ENOUGH TO COVER ALL THE
25 IMPACTS.

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1 THE MEMORANDUM OR THE NOTICE, THE MEMO OF
2 UNDERSTANDING FOR THE COUNTY OF SANTA BARBARA, BENITO,
3 AND SAN LUIS OBISPO HAVING TO DO WITH WHERE PRISONERS GO
4 BACK TO UPON RELEASE, YOU MENTIONED FAMILIES MOVING INTO
5 THE AREA. AND THAT HAS HAPPENED MY UNDERSTANDING SAY
6 FOR OUR MEN'S COLONY FAMILIES MOVE THERE. DOES THAT
7 CHANGE ANYTHING AS TO WHERE THESE PRISONERS GO UPON
8 RELEASE? MY UNDERSTANDING IS THAT THEY GO BACK TO THE
9 COUNTY.
10 THEY DON'T NECESSARILY GO BACK TO THE CITY, SO
11 I'M CLEAR ON THAT POINT. BUT WHEN FAMILIES THEN MOVE
12 HERE, I KNOW THE ARGUMENT GOES THAT YOU NEED SUPPORT.
13 YOU NEED ALL THESE WONDERFUL THINGS SAY A FAMILY
14 PROVIDES, BUT IT SEEMS TO ME, THEN, THAT THAT GOES
15 OPPOSITE TO WHAT THE MEMORANDUM IS.
16 ANOTHER THING I'M CONCERNED ABOUT HAS TO DO
17 WITH THE FENCING. YOU MENTIONED A LETHAL FENCE, BUT
18 FROM THE DIAGRAM IT LOOKS LIKE IT ONLY GOES AROUND THE
19 LEVEL-2 AREA. IS THERE ANY KIND OF FENCING THAT GOES
20 AROUND THE REENTRY FACILITY? I PROBABLY AM PRETTY NAIVE
21 ABOUT PRISONERS. HOWEVER, I DON'T CONSIDER THEM BOY
22 SCOUTS. AND MY GUESS MAY BE LACK OF EDUCATION ABOUT
23 THIS TOPIC OR WHATEVER MAKES ME THINK THAT THERE OUGHT
24 TO BE A FENCE.
25 THE OTHER THING IS, I WISH YOU WOULD DESCRIBE

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1 A LITTLE BIT BETTER THIS LETHAL FENCE AS TO WHAT IT
2 ACTUALLY LOOKS LIKE IN REGARDS TO INTERACTION BETWEEN
3 PRISONERS THAT ARE IN THE LEVEL TWO AND THE REENTRY OF
4 HOW MUCH INTERACTION CAN THERE BE EVEN THOUGH THIS FENCE
5 IS THERE. I KNOW A LOT OF INTERACTION GOES ON IN
6 PRISON, SAY, THAT EITHER WE DON'T WANT TO ADMIT TO BUT
7 WE DO ADMIT TO LATER AFTER THINGS HAVE BEEN DONE. SO
8 I'D LIKE TO KNOW A LITTLE BIT MORE ABOUT WHAT THAT FENCE
9 WILL ACTUALLY LOOK LIKE.
10 ANOTHER QUESTION IS HAVING TO DO WITH THE
11 REHAB FACILITY. WHERE WILL THESE EDUCATORS COME FROM?
12 ARE THEY EXPECTED TO COME FROM OUR COMMUNITY? DO THE
13 PRISONERS GO OUT TO OUR COMMUNITY COLLEGE OR DO THEY
14 STAY ON SITE FOR ALL OF THEIR CLASSWORK?
15 I'D ALSO LIKE TO SAY THAT -- I THINK IT WILL
16 HAPPEN IN THE EIR HAVING TO DO WITH THE IMPACT
17 PARTICULARLY ON OUR HOSPITAL FACILITIES. WHEN YOU TELL
18 ME THAT WE ARE GOING TO HAVE A HIGHER AGE POPULATION,
19 FROM MY NURSING BACKGROUND IT TELLS ME YOU'RE TALKING
20 ABOUT PEOPLE THAT HAVE CHRONIC ILLNESSES AND NEED FAR
21 MORE MEDICAL CARE THAN AN OUTPATIENT FACILITY PROVIDES.
22 DO WE END UP GETTING ADDITIONAL FUNDS FOR THAT FOR THE
23 IMPACT ON OUR COMMUNITY?
24 THE OTHER THING IS JUST -- AND IT'S NOT HAVING
25 TO DO WITH THE EIR. CAN YOU BREAK DOWN A LITTLE BIT

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1 MORE THE AGE OF THE PRISONERS FOR THE LEVEL TWO AND THE
2 REENTRY FACILITY, WHAT THOSE WILL BE?
3 I THINK I'VE ASKED ALL OF THE QUESTIONS THAT I
4 WROTE DOWN. I WASN'T QUITE CLEAR WHEN YOU SAID THAT
5 THERE WOULD BE FORMER INMATES COMING TO HELP RUN THE
6 FACILITY. IS THIS THE LEVEL-TWO FACILITY OR IS THIS THE
7 REHAB FACILITY THAT THEY WILL BE HELPING TO RUN?
8 THE OTHER THING IS, DOES THE REHAB FACILITY
9 STAND ON ITS OWN OR DOES IT NEED, SAY, SOME OF THE USE
10 OF THE FACILITY SUCH AS COOKING, LAUNDRY? ARE THESE
11 THINGS THAT ARE SHARED OR DOES IT STAND ALONE?
12 REGARDLESS OF WHETHER I LIKE OR DISLIKE THIS
13 PROGRAM, I REALLY DO APPRECIATE YOU REACHING OUT TO
14 PASO ROBLES. THIS IS NOT THE FIRST TIME THAT YOU HAVE
15 BEEN HERE. YOU'VE BEEN HERE A NUMBER OF TIMES. AND AS
16 FAR AS I'M CONCERNED WHEN IT COMES TO GOVERNMENT
17 MATTERS, A LOT OF TIMES YOU DON'T TO AGREE WITH ME, BUT
18 I CERTAINLY APPRECIATE IT WHEN YOU LISTEN. THANK YOU.
19 DIRECTOR SLEPPY: THANK YOU VERY MUCH. I'M
20 GOING TO TRY TO TOUCH ON A COUPLE OF ISSUES YOU RAISED.
21 I WILL ADDRESS EVERYTHING YOU'RE TALKING ABOUT SO WE'RE
22 GOING TO GO INTO DETAIL. REAL QUICKLY, WE'RE WELL AWARE
23 OF THE WATER ISSUE, AND WE INTEND TO BOTH COMPARE THE
24 USE OF OUR EXISTING WELLS AND ON-SITE RESOURCES WITH
25 CITY SUPPLIED WATER. SO WE WILL VERY SPECIFICALLY

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1 ADDRESS WHERE AND HOW MUCH WATER WE'RE GOING TO USE. WE
2 TEND TO HAVE A LOT OF WATER CONSERVATION REQUIREMENTS
3 FOR THESE FACILITIES.
4 LIGHTING IS VERY SPECIFICALLY AN ISSUE THE EIR
5 WILL ADDRESS. WE TEND TO USE DOWNWARD FACING LIGHTS,
6 AND WE HAVE A PARTICULAR ISSUE WITH THE AIRPORT. WE
7 DON'T WANT TO CONFUSE PILOTS THAT THEY'RE LANDING ON THE
8 WRONG PLACE. SO LIGHTING WILL BE ADDRESSED PRETTY
9 CLOSELY.
10 I MAY GET OUT OF ORDER HERE NOW. THE FAMILIES
11 ON THE REENTRY PROGRAM. BECAUSE THEY ARE ONLY THERE FOR
12 12 MONTHS, IT'S OUR OPINION THAT FAMILIES ARE NOT GOING
13 TO MOVE. THAT WOULD JUST BE NOT WORTH THE TROUBLE TO
14 MOVE. I'M GOING TO HAVE DEBORAH ANSWER THE LAST LEGAL
15 LOCATION. COULD YOU CLARIFY AGAIN WHERE THEY GO,
16 DEBORAH, REGARDLESS OF WHETHER THEIR FAMILY MOVES.
17 MS. JOHNSON: YOU ASKED THE QUESTION ON THE
18 LEVEL TWO'S AND WHO WOULD BE IN LONG TERM. AND IF SOME
19 OF THEIR FAMILIES MAY MOVE HERE, WHERE WOULD THE INMATES
20 THEN PAROLE TO. GENERALLY THEY STILL WILL NEED TO
21 PAROLE TO THEIR COUNTY OF LAST LEGAL RESIDENCE. LET'S
22 SAY IT'S LOS ANGELES. WHILE THEY'RE ON PAROLE IN
23 LOS ANGELES, THEY CAN APPLY IF THEY HAVE A JOB IN A
24 SECURE HOME TO COME BACK UP TO SAN LUIS OBISPO-SANTA
25 BARBARA.

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1 THAT OFTEN DOES NOT HAPPEN WHERE THEY GET A
2 JOB IN L.A. AND THEY STAY THERE. BUT THEY'RE GOING TO
3 BE AT FIRST IN THEIR COUNTY OF LAST LEGAL RESIDENCE FOR
4 GENERALLY ABOUT SIX MONTHS BEFORE THEY CAN POSSIBLY
5 MAYBE BE ABLE TO COME BACK.
6 I WILL SAY THAT IT'S ABOUT A THIRD OF OUR
7 INMATES ARE FROM L.A. THAT'S WHY I'M PICKING L.A.
8 GENERALLY FAMILIES DO NOT TEND TO MOVE TO WHERE THE
9 INMATES ARE. WE DON'T SEE WHEN WE OPEN A NEW
10 INSTITUTION LIKE AN INCREASE IN THE NUMBER OF FAMILIES.
11 IT'S JUST TOO EXPENSE TO MOVE FROM L.A. OR SAN DIEGO UP
12 HERE.
13 ALSO WE'RE LOOKING AT OLDER INMATES. A LOT OF
14 THESE INMATES ARE IN FOR LONG PERIODS OF TIME AND THAT
15 JUST HASN'T BEEN SOMETHING -- I KNOW THAT ACAP THE
16 ASSOCIATION HAS DONE SOME RESEARCH ON THAT, AND WE HAVE
17 GENERALLY FOUND IT'S NOT ALL OF A SUDDEN AN INCREASE OF
18 THE POPULATION OF THE INMATES' FAMILIES.
19 DIRECTOR SLEPPY: THANK YOU. THE AGE OF
20 INMATES AT LEVEL TWO, WHICH I DON'T HAVE A SPECIFIC
21 NUMBER, BUT WE BELIEVE WE ARE TALKING ABOUT OLDER
22 INMATES. BUT THOSE INMATES THAT WE'RE BRINGING IN
23 SPECIFICALLY WOULD NOT HAVE ACUTE CARE CHRONIC PROBLEMS
24 THAT WOULD REQUIRE HOSPITALIZATION. WE'RE BRINGING IN
25 QUITE FRANKLY OUR HEALTHIER LEVEL-TWO OLDER INMATES. WE

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1 HAVE CLINICAL SERVICES OUT THERE AND WE WILL STAFF IT.
2 WE WILL SPECIFICALLY LOOK AT ANY POTENTIAL
3 INCREASE IN HOSPITAL DEMANDS, SERVICE DEMANDS, AND 911
4 DEMANDS. BUT WE ARE NOT INTENDING TO BRING INMATES WHO
5 HAVE A LOT OF CRITICAL CHRONIC CARE NEEDS THAT THEY NEED
6 TO GO TO THE HOSPITAL A LOT. BUT THEY WILL BE OLDER.
7 THEY WILL HAVE OUTPATIENT TYPE SERVICES FOR VARIOUS AND
8 SUNDRY THINGS.
9 THE LETHAL FENCE IS ONLY AROUND THE LEVEL-TWO
10 INSTITUTION. THAT'S BECAUSE IT'S A STANDARD
11 CORRECTIONAL FACILITY. THE LETHAL FENCE IS BARELY
12 VISIBLE. IT'S BETWEEN TWO 12-FOOT-HIGH CYCLONE FENCES,
13 AND IT'S ENCAPSULATED INSIDE THERE. WE HAVE
14 SPECIFICALLY DESIGNED IT, AND YOU CAN STAY AFTER AND JOE
15 CAN TALK ABOUT IT.
16 WE HAVE SPECIFICALLY DESIGNED THE REENTRY,
17 THOUGH, THAT THE BUILDING ENVELOPE IS THE SECURE
18 PERIMETER. SO WE HAVE DOUBLE DOORS. WE'VE GOT CARPORTS
19 WHERE VEHICLES PULL IN AND GATES CLOSE BEHIND THEM. SO
20 THERE'S NEVER AN OPENING AND ACCESS POINT FOR AN INMATE
21 TO GET OUT.
22 SO IT'S VERY SIMILAR TO A JAIL CONSTRUCTION
23 WHERE YOU COME THROUGH ONE DOOR, AND TO GET INTO THE
24 SECURE AREA YOU GO THROUGH ANOTHER DOOR BUT THE FIRST
25 DOOR CLOSES BEHIND YOU. WHEN A VAN COMES IN, THE GATE

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CLOSES BEHIND IT AND IT'S IN A LOCKED AREA. SO THEY ARE BOTH VERY SECURE. WE CAN TALK ABOUT THAT FROM THE SITE PLAN ONE ON ONE.

LAUNDRY SERVICES AND THINGS LIKE THAT WE'RE STILL WORKING THROUGH. THE TWO FACILITIES WILL BE OPERATED STAND-ALONE. WE DO BELIEVE THERE WILL BE CUMULATIVE VALUE IN SHARING SERVICES, BUT WE'RE PLANNING IT FROM THE STANDPOINT OF STAND-ALONE. BUT THERE WILL SURELY BE THE SHARED SERVICES LIKE LAUNDRY AND THINGS LIKE THAT.

THE SCHOOL PROGRAM, NONE OF THESE INMATES IN EITHER FACILITY AND PARTICULARLY THE SECURE REENTRY WILL LEAVE TO GO FOR ANY SERVICE UNTIL THEY ARE PAROLED. SO WHEN THEY COME FROM THEIR 12-MONTH OR 11- OR 10-MONTH COMMISSION, THEY'RE STAYING INSIDE. SO IF THERE ARE ANY EDUCATIONAL OPPORTUNITIES, THOSE FOLKS WILL COME INTO THE FACILITY TO GIVE THOSE CLASSES. RECRUITMENT WILL BE FROM THE STATEWIDE POOL. WE'LL TRY TO RECRUIT LOCALLY, BUT RECRUITABLE EMPLOYEES ARE -- WE ARE UNAWARE OF WHERE THE EMPLOYEES ARE GOING TO COME FROM AT THIS POINT. I THINK THAT'S MY LIST.

SO ANYONE ELSE WANT TO HAVE A FEW WORDS FOR US? OKAY. THANK YOU VERY MUCH. WE'LL STICK AROUND FOR A LITTLE WHILE IF YOU WANT TO COME UP AND ASK QUESTIONS. WE APPRECIATE YOU COMING OUT. IF THERE ARE FOLKS THAT

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ARE INTERESTED IN THIS PROJECT, PLEASE GET THEM MY NAME OR NANCY'S NAME. WE'LL FIGURE OUT HOW TO MEET WITH THEM AND TALK TO THEM. THERE ARE 25 DAYS STILL RUNNING ON THIS NOTICE TO GET YOUR COMMENTS IN, SO WE LOOK FORWARD TO THAT. THANK YOU FOR COMING OUT. WE APPRECIATE OUR LOCAL PARTNERS SHOWING UP TONIGHT. WE APPRECIATE DAVID AND JIM PARTICULARLY. THANK YOU.

(PROCEEDINGS CONCLUDED AT 7:00 P.M.)

--OOO--

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CERTIFICATE OF REPORTER

* * * * *

I, THE UNDERSIGNED CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, DO HEREBY CERTIFY:

THAT THE FOREGOING PROCEEDINGS WERE TAKEN BEFORE ME AT THE TIME AND PLACE THEREIN SET FORTH. THAT THE PROCEEDINGS WERE RECORDED STENOGRAPHICALLY BY ME AND WERE THEREAFTER TRANSCRIBED UNDER MY DIRECTION; THAT THE FOREGOING IS A TRUE RECORD OF THE PROCEEDINGS AND OF ALL COMMENTS MADE AT THE TIME OF THE PROCEEDINGS.

I FURTHER CERTIFY THAT I AM A DISINTERESTED PERSON AND AM IN NO WAY INTERESTED IN THE OUTCOME OF THESE PROCEEDINGS OR CONNECTED WITH OR RELATED TO ANY OF THE PARTIES.

IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME ON THIS DATE: _____.

_____

CHRISTINE PLOSSER
CSR NO. 6333

90d8d483-726b-4c53-a391-9448fac2047a

1 CERTIFICATE OF REPORTER

2 * * * * *

3 I, THE UNDERSIGNED CERTIFIED SHORTHAND REPORTER IN
4 AND FOR THE STATE OF CALIFORNIA, DO HEREBY CERTIFY:
5 THAT THE FOREGOING PROCEEDINGS WERE TAKEN BEFORE ME
6 AT THE TIME AND PLACE THEREIN SET FORTH. THAT THE
7 PROCEEDINGS WERE RECORDED STENOGRAPHICALLY BY ME AND
8 WERE THEREAFTER TRANSCRIBED UNDER MY DIRECTION; THAT THE
9 FOREGOING IS A TRUE RECORD OF THE PROCEEDINGS AND OF ALL
10 COMMENTS MADE AT THE TIME OF THE PROCEEDINGS.
11 I FURTHER CERTIFY THAT I AM A DISINTERESTED PERSON
12 AND AM IN NO WAY INTERESTED IN THE OUTCOME OF THESE
13 PROCEEDINGS OR CONNECTED WITH OR RELATED TO ANY OF THE
14 PARTIES.
15 IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME ON
16 THIS DATE: November 4, 2009.
17
18
19 Christine Plosser
CHRISTINE PLOSSER
20 CSR NO. 6333
21
22
23
24
25

Memorandum

To: Mayor & Council

From: Ronald Whisenand, Community Development Director

CC: Jim App, City Manager
Lisa Solomon, Chief of Police
Bob Sleppy, Department of Corrections

Date: 7/30/2010

Re: Paso Robles Correctional Facility Environmental Issues

I have been giving some thought to the potential environmental impacts caused by a renovation and re-use of the California Youth Authority (CYA) property on Airport Road. To date the following proposals have been discussed:

- 1000 inmate adult prison
- 500 bed re-entry prison including housing inmates from surrounding counties
- Fire Camp

While there have been no formal decisions by the California Department of Corrections that all three programs are being pursued, discussion locally and at a State level would appear to support considering all three as potential users of the State's Paso Robles property. The 160 acre site is clearly capable of physically housing all three operations. The question however is whether the site is sufficient from an environmental standpoint,

Before I outline potential impact areas that need to be studied, I thought some background information necessary given the unique nature of the project. First, whatever the ultimate re-use plan is, the project will be a State project. While this means the State will take on the Lead Agency role pursuant to CEQA, they are subject to the same environmental rules and processes that we go through when we evaluate private development in the City. Second, the facility is currently being used to house prisoners so some may claim that re-use would cause no further impacts than current operations. The key however is to look at the nature of the operations and compare present day impacts with those caused by re-use/expansion. This comparison to baseline impacts will need to occur through the development of an Initial Study which should be subject to City review and comment.

The Initial Study is the document that will identify and explore potential impacts of the State's future use of the CYA property. To date and without seeing any plans for the property, I have identified the following impact areas that will need to be addressed:

- <u>Land Use & Planning</u> This environmental issue relates to land use compatibility of the proposed facilities and the projects conformance with the City's adopted Land Use Policies such as the General Plan, Airport Land Use Plan, and Economic Strategy. Compatibility with airport operations and

compatibility with nearby business park development will be two of the most important issues to address.

- Population & Housing Input from State officials have indicated that staffing for the new facilities will result in the addition of jobs in our community. Since our General Plan tries to accomplish a jobs/housing balance, it is assumed that many of those new workers will need to find housing in the local community. The impacts of this housing growth and its secondary impacts on services will need to be evaluated.
- Water The current facility obtains its water from on-site wells drawing from the local groundwater basin. Various studies have identified that the basin is either at or nearing capacity. The impacts of water supply need to be addressed including the effect of expanding agricultural uses in the area that have superior rights to groundwater resources.
- Air Quality Short term (construction) and long term (operational) impacts to air quality need to be addressed. The project will clearly meet APCD's analysis threshold and would also require an evaluation of carbon emissions pursuant to AB32.
- Transportation/Circulation Traffic impacts will clearly be a significant project impact. The Highway 46 E corridor is operating at capacity according to Caltrans. In addition, the intersection of Airport Road and 46E is operating at LOS F. Caltrans has previously determined that additional trips at 46E and Airport Road meet the threshold for preparation of an EIR. Similar comments on traffic congestion are also supported by the California Highway Patrol.
- Biological Resources Several rare and endangered species are known to exist in this region of the County. The most significant species is the San Joaquin Kit Fox and the project site is at heart of California Department of Fish and Game's habitat range for the species. Impacts and mitigation strategies will be required.
- Hazards The prison site is located within a Traffic Pattern Zone (Safety Zone 5) of the Paso Robles Airport. Residential land uses are prohibited from locating within the influence of the Airport Land Use Plan. While not a residential land use per se, the County's Airport Land Use Plan prescribes maximum densities for people to be located within those areas (number of persons allowed per acre). The project should evaluate the potential safety hazards that exist for inmates and staff of an expanded prison facility.
- Noise Same issue as the previous bullet.
- Utilities & Service Systems The facility uses the City's sewer system to handle wastewater from the facility. The existing sewer system and lift station may not be adequate to address any increase in flow. In addition the environmental analysis should evaluate the capacity at the City's wastewater treatment plant.
- Aesthetics The present CYA complex lies within an area identified by the City's General Plan for business park development. A business park was recently approved immediately south of CYA and will be built to a controlled set of design guidelines to ensure quality. The addition of new buildings/facilities, security fencing, guard towers, and security lighting will clearly present an aesthetic challenge that needs to be addressed and mitigated.
- Light and Glare Similar and related to the issue of aesthetics, night-time lighting and glare need to be addressed. Photos provided by Department of Corrections staff show the presence of numerous tall light standards that are internal to and surround the facility. Off-site glare and night sky illumination impacts need to be addressed.
- Cultural Resources The areas that lie near Huer Huero Creek are rich in cultural remains. A full cultural evaluation will be necessary.
- Agriculture The site contains soils capable of agricultural production. The loss or conversion of these soils needs to be evaluated and mitigated.

- Cumulative Impacts CYA facilities currently occupy less than one half of the 160 acre parcel. In addition, the State is considering not only re-use of CYA facilities for a 1000 bed adult prison, but a 500 bed reentry facility as well as a fire camp. It is clear that cumulative impacts will occur as the State decides how to use this property.

Based on the scope of the project and the above list of impact issues, it is City staff's opinion that an EIR will be required for re-use of CYA facilities. CEQA requires the preparation of an EIR when the Lead Agency determines that "it can be fairly argued, based on substantial evidence, in light of the whole record, that a project may have a significant effect on the environment." Pursuant to Section 15064 of the California Code of Regulations, the City intends to present the above impact list and supplemental evidence of significance to the California Department of Corrections. We believe that facts and evidence outlined above will necessitate the preparation of and EIR.

Attached:

1. Caltrans Memo dated January 13, 2007
2. California Highway Patrol Memo dated August 3, 2007
3. Caltrans letter dated August 3, 2007 regarding traffic threshold
4. June 14, 2007 Traffic Study for the Links Industrial Project
5. Kit Fox Informational Booklet

APPENDIX B

MOU between the City of Paso Robles, County of San Lois Obispo and California Department of Corrections Rehabilitation

Memorandum of Understanding

Among the Counties of San Benito, Santa Barbara, and San Luis Obispo, the City of El Paso de Robles, and the California Department of Corrections and Rehabilitation; Regarding the Central Coast Regional Secure Community Reentry Facility

This Memorandum of Understanding ("**MOU**") is entered into among the Counties of San Benito, Santa Barbara, and San Luis Obispo ("**Partnering Counties**"), the City of El Paso de Robles ("**City**"), and the California Department of Corrections and Rehabilitation ("**CDCR**") and is effective this 16th day of December, 2008. Each of the Partnering Counties, the City, and CDCR are each referred to as a "**Party**" and are collectively referred to as the "**Parties**."

Recitals

WHEREAS, in enacting the Public Safety and Offender Rehabilitation Act of 2007, as amended (the "Act"), the Legislature has found and declared that: (a) the continuity of services provided both before and after an inmate's release on parole will improve the parolee's opportunity for successful reintegration into society (Penal Code § 6270(a)); and (b) placing an inmate in a secure correctional facility within the community prior to release on parole into that community provides the opportunity for both parole officers and local law enforcement personnel to better coordinate supervision of that parolee (Penal Code § 6270(b));

WHEREAS, Penal Code section 6271 authorizes CDCR to construct, establish and operate reentry facilities in a city, county, or city and county that requests a reentry facility (**"Secure Community Reentry Facility" or "SCRF"**);

WHEREAS, Penal Code section 6273 provides that in the locations where a Secure Community Reentry Facility is established, CDCR shall develop an ongoing collaborative partnership with local government, local law enforcement, and community service providers;

WHEREAS, the Partnering Counties have expressed their intent to assist and support CDCR in establishing a Secure Community Reentry Facility on certain property within the City ("**Regional Facility**") and in the vicinity of the El Paso De Robles Youth Correctional Facility where such Secure Community Reentry Facility may house inmates from each of the Partnering Counties;

WHEREAS, CDCR is committed to assisting counties with inmate transportation upon release from a Secure Community Reentry Facility, such as the Regional Facility; and

WHEREAS, the City is willing to cooperate in the siting of the Regional Facility within the City provided that the Partnering Counties and CDCR assure the City they will establish, fund and maintain procedures to transport Regional Facility parolees to their respective communities in a timely and efficient manner for so long as the Regional Facility is in operation;

WHEREAS, the Partnering Counties and CDCR intend to enter into the Central Coast Regional Secure Community Reentry Facility Siting Agreement (the "Siting Agreement") regarding the use of property within the City for the Regional Facility and other associated obligations with respect thereto.

WHEREAS, the Parties intend the Siting Agreement and this MOU to create a collaborative planning process for the evaluation and implementation of the SCRF that will not commit any of the Parties to a definite course of action until the completion of all planning activities.

WHEREAS, as part of that collaborative planning process, each Party understands and acknowledges that the identification of the proposed location for the Regional Facility, which is certain property within the City, is still tentative and that the Partnering Counties, the City, and CDCR intend, through the environmental review process contemplated in paragraph 7 below, fully to consider the feasibility and advantages/disadvantages of alternative locations for the Regional Facility that are located either within or outside the City, as well as alternative configurations and feasible mitigation measures for the proposed project.

Agreement

NOW, therefore, the Parties agree as follows:

1. CDCR's Coordination of Transportation. In collaboration with the respective counties, CDCR will ensure that all inmates released to parole from the Regional Facility will have coordinated transportation from the Regional Facility directly to their respective communities. Providing the appropriate method of transportation will necessitate planning, coordination, and facilitation of transportation options including use of representatives from the Sheriff's department for the Partnering County of the parolee's last legal residence, use of community based organizations or CDCR (Parole Agent or institution transportation unit).

2. Reentry Parolee Transportation. The Partnering Counties and CDCR will coordinate and develop the transportation of released parolees from the Regional Facility to their county of last legal residence based upon each parolee's release plan and in accordance with section 3003 of the Penal Code (**"Release Location"**). This section 2 shall not limit section 3003(b)'s authorization for CDCR or the Board of Parole Hearings to parole an inmate to a different county if that would be in the best interests of the public. The method of transportation will be determined prior to, and will be available contemporaneous with an inmate's release from the Regional Facility on parole, and in all cases shall include an escort arranged by the Partnering County and/or CDCR. In cases where a parolee is released and scheduled to return to San Luis Obispo County, transportation will be provided by community based organizations or representatives from the San Luis Obispo County Sheriff's department or CDCR directly from the Regional Facility to the county jail complex or the parolee's direct placement location. If the parolee intends to transfer to a permanent residence or a residential facility within the City, pursuant to an adopted parolee release plan, the parolee shall be transported directly from the Regional Facility to the proposed residence or facility. Each of the Partnering Counties covenants and agrees that it shall be responsible for ensuring that the parolees from its respective county are transported from the Regional Facility in accordance with this MOU.

3. Transportation Mode. So long as the Regional Facility is in operation, each Partnering County shall be the primary responsible party for transporting a parolee from the Regional Facility to the designated Release Location in such partnering County. In the unusual event that San Benito or Santa Barbara County is unable to provide for or complete the transport, CDCR staff will work with the County, which may include CDCR personnel transporting or arranging transportation for the parolee from the Regional Facility to the Release Location. Based on the distance from the Regional Facility, CDCR retains the right to request and receive reimbursement from the San Benito and Santa Barbara Counties for CDCR's actual costs of providing transport services, including but not limited to the cost of staff-time and fuel. If requested in writing, CDCR agrees to assist the San Luis Obispo Sheriff in providing parolee release transportation to the county jail complex on alternating days or other schedule mutually agreed upon by CDCR and San Luis Obispo County. CDCR and the Partnering Counties specifically agree that no parolee shall be released from the Regional Facility unless and until the arranged transportation to a Release Location is available for such transport.

4. No City Responsibility for Parolee Transportation. The transportation of released Regional Facility inmates shall not utilize any City services or public transportation provided and/or funded primarily by the City, and shall be accomplished without financial cost to the City.

5. Community Services for Parolees. Prior to the release of any parolees from the Regional Facility, CDCR and the Partnering Counties will have a reentry planning team in place, conduct an assessment of existing community services within each of the Partnering Counties, identify any additional services needed by parolees, and seek viable options, including expansions of programs where warranted and funded. In no case shall the Partnering Counties be responsible for the costs of any such additional services or options that are the responsibility of CDCR to provide.

6. Continuation of Parolee Services. So long as the Regional Facility is in operation, CDCR agrees that it shall provide post release services for parolees within the Partnering Counties utilizing allocated resources, and will continue to utilize CDCR's existing allocated resources and funding to provide services to the active parole population in each of the Partnering Counties.

7. Environmental Review.

   (a) Approval and/or carrying out of the proposed Regional Facility shall only occur after compliance with all legally required environmental review pursuant to the California Environmental Quality Act (Public Resources Code §21000 et seq.) ("CEQA"), and shall also only occur after making any required findings pursuant to 14 C.C.R. section 15091 and, as necessary and if supported by substantial evidence, a statement of overriding considerations pursuant to 14 C.C.R. section 15093. CDCR shall use its best faith efforts to actively consult with the City regarding CDCR's preparation of all documentation required by CEQA, shall send notices to City during such environmental review process and solicit

comments from City regarding the potential environmental impacts of the Regional Facility and any measures required to mitigate those impacts.

(b) The Parties to this MOU hereby understand and acknowledge the following:

(i) CEQA requires all public agencies to consider feasible potential alternative locations for a proposed project, as well as feasible alternative configurations and mitigation measures for a proposed project.

(ii) No Party has yet given any approval to locating the Regional Facility on certain property within the City owned by the State of California. Any approvals of the SCRF (including, but not limited to location) shall only occur after a thorough and public consideration of all feasible alternative locations, configurations and mitigation measures, as required by CEQA.

(iii) CDCR will, as Lead Agency for the proposed Regional Facility, consider an appropriate set of alternative locations, configurations and mitigation measures for the SCRF. Each of the other Parties will cooperate with CDCR in this evaluation of potential alternative locations, configurations and mitigation measures for the SCRF but shall be free to exercise its own judgment in evaluating the proposed project as it is finally developed.

(iv) In order fully to implement the provisions of CEQA, CDCR intends to commence the preparation of an appropriate environmental document at the soonest possible date.

8. City Resolution. Based on the assurances provided by each of the Partnering Counties in their respective resolutions approving this MOU and by CDCR in its approval of this MOU and in specific reliance thereon, the City is willing to adopt a resolution that supports locating a Regional Facility within the City. This MOU meets the terms of City resolution 08-141 for City support for the Regional Facility.

9. Remedies for Breach. In the event that any Parties to this MOU are found to be in breach of any obligation under this MOU, the Parties hereto are entitled to seek any remedies, whether legal or equitable, available to enforce the terms of this MOU. Any prevailing party in any such action shall be entitled to recover attorneys' fees, costs and any other necessary disbursements related to such action.

10. Termination. This MOU shall automatically terminate without notice after seven years from this MOU's effective date if the Regional Facility is not sited in the City and operating in accordance with CDCR standards.

11. Siting Agreement. Each Partnering County and CDCR agrees that any joint operations/governance or other agreement that it, including any successor in interest, enters into in furtherance of the Siting Agreement, with respect to the Regional Facility, shall be consistent with the terms of this MOU.

12. General Provisions.

a. *Authority.* Each signatory of this MOU represents that s/he is authorized to execute this MOU on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.

b. *Amendment.* This MOU may be amended or modified only by a written instrument executed by each of the Parties to this MOU.

c. *Jurisdiction and Venue.* This MOU shall be governed by and construed in accordance with the laws of the State of California, except for its conflicts of law rules. Any suit, action, or proceeding brought under the scope of this MOU shall be brought and maintained to the extent allowed by law in the County of Sacramento, California.

d. *Headings.* The paragraph headings used in this MOU are intended for convenience only and shall not be used in interpreting this MOU or in determining any of the rights or obligations of the Parties to this MOU.

e. *Construction and Interpretation.* This MOU has been arrived at through negotiations and each Party has had a full and fair opportunity to revise the terms of this MOU. As a result, the normal rule of construction that any ambiguities are to be resolved against the drafting Party shall not apply in the construction or interpretation of this MOU.

f. *Entire Agreement.* This MOU constitutes the entire understanding of the Parties with respect to the subject matter of this MOU and supersedes any prior oral or written agreement, understanding, or representation relating to the subject matter of this MOU.

g. *Counterparts.* This MOU may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

h. *Waivers.* Waiver of any breach or default hereunder shall not constitute a continuing waiver or a waiver of any subsequent breach either of the same or of another provision of this Agreement and forbearance to enforce one or more of the remedies provided in this Agreement shall not be deemed to be a waiver of that remedy.

i. *Notices.* All notices, requests, demands or other communications required or permitted under this MOU shall be in writing unless provided otherwise in this MOU and shall be deemed to have been duly given and received on: (i) the date of service if served personally or served by facsimile transmission on the Party to whom notice is to be given at the address(es) provided below, (ii) on the first day after mailing, if mailed by Federal Express, U.S. Express Mail, or other similar overnight courier service, postage prepaid, and addressed as provided below, or

(iii) on the third day after mailing if mailed to the Party to whom notice is to be given by first class mail, registered or certified, postage prepaid, addressed as follows:

County of San Luis Obispo

San Luis Obispo County Sheriff
P.O. Box 32
San Luis Obispo, CA 93406
(805) 781-4540
Fax: (805) 781-1075

County of San Benito

Board of Supervisors
481 4th Street
Hollister, CA 95023
Attn: Jaime De La Cruz, Chair

County of Santa Barbara

Santa Barbara County Sheriff
Attention: Commander
Jail Programs and Planning Division
Custody Operations

4436 Calle Real
Santa Barbara, CA 93110

County of Santa Barbara
County Executive Officer
105 East Anapamu Street - Room 406
Santa Barbara, CA 93101-2065

CDCR

Deputy Director
Facilities Management Division
Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

Deputy Director
Acquisitions and Dispositions
Department of Corrections and Rehabilitation
9838 Old Placerville Road, Suite B
Sacramento, CA 95827

City of El Paso de Robles

City of El Paso de Robles
1000 Spring Street
Paso Robles, CA 93446

Attn: Chief of Police
Phone: (805) 227-7520
Fax: (805) 237-4138

with a copy to:

Iris P. Yang
McDonough Holland & Allen PC
555 Capitol Mall, 9th Floor
Sacramento, CA 95814

Phone: (916) 444-3900
Fax: (916) 444-8334

(signature page follows)

ATTEST:

Linda Churchill, Clerk of the Board of Supervisors, San Benito County

By: Linda Churchill

Date: 1/6/09

APPROVED AS TO LEGAL FORM
Dennis LeClere, San Benito County Counsel

By: Terra L. Chaffee
Terra Chaffee, Deputy County Counsel

Date: 12/19/08

APPROVED AS TO FORM
DENNIS A. MARSHALL,
COUNTY COUNSEL

By: _____
Deputy

A-22

IN WITNESS THEREOF, the parties hereto have executed this Agreement as specified below.

COUNTY OF SAN LUIS OBISPO

By:

Name: PATRICK HEDGES

Title: SHERIFF-CORONER

Date: DECEMBER 19, 2008

COUNTY OF SANTA BARBARA

By:

Name: Supervisor Joseph Centeno

Title: Chair, Board of Supervisors

Date: 1/27/09

COUNTY OF SAN BENITO

By:

Name: Anthony B Botelho

Title: Board Of Supervisors, Chair

Date: January 06, 2009

CITY OF EL PASO DE ROBLES

By:

Name: JAMES L. APP

Title: CITY MANAGER

Date: DECEMBER 16, 2008

CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION

By:

Name: DEBORAH HYSEN

Title: CHIEF DEPUTY SECRETARY

Date: February 6, 2009

APPENDIX C

Air Quality

Construction

	Daily			Quarterly			Daily	Quarterly	Daily	Quarterly
	ROG	NOx	ROG+NOx	ROG	NOx	ROG+NOx	DPM	DPM	Dust	Dust
	lb	lb	lb	ton	ton	ton	lb	ton	lb	ton
Level II-Construction*	221.17	57.79	**278.96**	0.893333	0.643333	**1.54**	3.75	0.04	24.51	0.39
Level II-Demo**	1.3	10.54	**11.84**	0.01	0.12	**0.13**	0.66	0.01	3.75	0.04
			290.8			**1.67**	4.41	**0.05**		**0.43**
Cal Fire*	67.41	44.48	**111.89**	0.286667	0.393333	**0.68**	2.73	0.02	7.45	0.12
			402.69			**2.35**	**7.14**	**0.07**		**0.55**
Reentry*	224.73	39.51	**264.24**	0.866667	0.633333	**1.50**	2.53	0.04	24.82	0.38
			666.93			3.85	9.67	0.11		0.93

*from daily to quarterly, annual emissions of ROG + NOx and DPM represented 280 days of activity thus the annual emissions were divided by 3 to ~ 90 days, for fugitive dust this mostly occurred over a quarter thus all of the annual were reported as quarterly
**from daily to quarterly entire annual from modeling was used b/c < 90 days

Operation

	Daily			Yearly			Daily
	ROG	NOx	ROG+NOx	ROG	NOx	ROG+NOx	CO
	lb	lb	lb	ton	ton	ton	lb
Level II	8.74	11.67	20.41	1.7	1.87	3.57	72.39
Cal Fire	0.88	1.04	1.92	0.22	0.17	0.39	4.92
			22.33			3.96	77.31
Reentry	6	8.1	14.1	1.16	1.29	2.45	51.07
			36.43			6.41	128.38

I-Estrella Level II Adult Male Correctional Facility									
Construction									
NEW Building									
Receiving and Release	5,500	sq. feet							
Health Care Services Addition	15000	sq. feet							
Mental Health EOP	8000	sq. feet							
Complex Control	14000	sq. feet							
Visitor Processing	3500	sq. feet							
Family Visiting	2414	sq. feet							
Guard Towers	388	sq. feet							
Work Change	629	sq. feet							
	49,431								
NEW Structures									
Staff Parking (100 x 100)	10000	sq. feet							
Visitor Parking (90 x 90)	8100	sq. feet							
Raised Security Control Berm (80 x 80)	6400	sq. feet							
Staff Sallyport (40 x 40)	1600	sq. feet							
	26100								
NEW FENCH/ROAD									
Length of New Patrol Road	6850	*Assumes no heavy-duty equipment or major ground disturbance would be associated with the fence installation.							
Width of Disturbance Area	20								
	137000	sq. feet							
TOTAL NEW CONSTRUCTION	212,531	sq. feet	4.879712	acres	212.531	KSF			
DEMO									
130 x 40	5200	sq. feet							
90 x 90	8100	sq. feet							
TOTAL DEMO	13300	sq. feet	0.305368	acres	13.3	KSF	Assumed 20 feet for Height *	266000	cubic feet Total
							Max Day Assuming a 1 month demo period	8866.667	
Operational									
[Existing Structures + New]									
Receiving and Release	5,500	sq. feet							
Health Care Services Addition	15000	sq. feet							
Mental Health EOP	8000	sq. feet							
Complex Control	14000	sq. feet							
Visitor Processing	3500	sq. feet							
Family Visiting	2414	sq. feet							
Guard Towers	388	sq. feet							
Work Change	629	sq. feet							
Admin Building	14995								
Admissions and N Cottage	15089								
Commissary/Laundry Complex	15491								
Boiler Plant	3264								
Kitchen/Bakery Complex	15530								
Avenal Cottage	8110								
Los Osos-West Cottage	8110								
Cayucos	8110								
Los Osos-East Cottage	8110								
N Cottage	8060								
Morro Cottage	8060								
Auditorium	7115								
Academic School	15166								
Special Education	7700								
Vocational Shops	15144								
Gym	10968								
C. Cottage	8642								
Library and Vocational	8436								
C. Cottage	8060								
S.S. Cottage	8060								
Gym	6000								
Canteen	2400								
Living/Education Unit	18751								
CDF Barracks	15650								
Visitor's Building	4550								
Education Building	7320								
Electrical Substation	450								
School Control Center	1960								
Maintenance Building	19028								
Infirmary	9942								
TOTAL OPERATIONAL	337,702	sq. feet	7.753638	acres	337.702	KSF			
	Total ADT		830	Trip Rate	2.457788				
Construction Schedule (Default from URBEMIS)									
	Start	End							
Fine Site Grading	11/30/2007	1/11/2008							
Paving	12/28/2007	1/11/2008							
Building	1/11/2008	8/22/2008							
Coating	8/8/2008	9/5/2008							
Demo	12/8/2007	1/8/2008							
Adjusted for Feb. 1st 2011 Start Date									
	Start	End							
Fine Site Grading	2/1/2011	3/15/2011							
Paving	3/1/2011	3/15/2011							
Building	3/15/2011	10/25/2011							
Coating	10/11/2011	11/8/2011							
Demo	2/9/2011	3/12/2011							

Level II => Demo

7/12/2010 11:04:17 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Demo.urb924

Project Name: Level II Facility-Demo

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	1.30	10.54	7.00	0.01	3.75	0.66	4.40	0.78	0.61	1.39	1,306.57

7/12/2010 11:04:17 AM

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 2/9/2011-3/11/2011 Active Days: 23	**1.30**	**10.54**	**7.00**	**0.01**	**3.75**	**0.66**	**4.40**	**0.78**	**0.61**	**1.39**	**1,306.57**
Demolition 02/09/2011-03/12/2011	1.30	10.54	7.00	0.01	3.75	0.66	4.40	0.78	0.61	1.39	1,306.57
Fugitive Dust	0.00	0.00	0.00	0.00	3.72	0.00	3.72	0.77	0.00	0.77	0.00
Demo Off Road Diesel	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo On Road Diesel	0.19	3.21	0.96	0.00	0.02	0.11	0.12	0.01	0.10	0.10	495.53
Demo Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

Phase Assumptions

Phase: Demolition 2/9/2011 - 3/12/2011 - Type Your Description Here

Building Volume Total (cubic feet): 265881.8

Building Volume Daily (cubic feet): 8862

On Road Truck Travel (VMT): 123.08

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

7/12/2010 11:05:47 AM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Demo.urb924

Project Name: Level II Facility-Demo

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	1.30	10.54	7.00	0.01	3.75	0.66	4.40	0.78	0.61	1.39	1,306.57

7/12/2010 11:05:47 AM

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 2/9/2011-3/11/2011 Active Days: 23	**1.30**	**10.54**	**7.00**	**0.01**	**3.75**	**0.66**	**4.40**	**0.78**	**0.61**	**1.39**	**1,306.57**
Demolition 02/09/2011-03/12/2011	1.30	10.54	7.00	0.01	3.75	0.66	4.40	0.78	0.61	1.39	1,306.57
Fugitive Dust	0.00	0.00	0.00	0.00	3.72	0.00	3.72	0.77	0.00	0.77	0.00
Demo Off Road Diesel	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo On Road Diesel	0.19	3.21	0.96	0.00	0.02	0.11	0.12	0.01	0.10	0.10	495.53
Demo Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

Phase Assumptions

Phase: Demolition 2/9/2011 - 3/12/2011 - Type Your Description Here

Building Volume Total (cubic feet): 265881.8

Building Volume Daily (cubic feet): 8862

On Road Truck Travel (VMT): 123.08

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

7/12/2010 11:05:59 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Demo.urb924

Project Name: Level II Facility-Demo

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	0.01	0.12	0.08	0.00	0.04	0.01	0.05	0.01	0.01	0.02	15.03

7/12/2010 11:05:59 AM

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011	0.01	0.12	0.08	0.00	0.04	0.01	0.05	0.01	0.01	0.02	15.03
Demolition 02/09/2011-03/12/2011	0.01	0.12	0.08	0.00	0.04	0.01	0.05	0.01	0.01	0.02	15.03
Fugitive Dust	0.00	0.00	0.00	0.00	0.06	0.00	0.06	0.01	0.00	0.01	0.00
Demo Off Road Diesel	0.01	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.05
Demo On Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.70
Demo Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27

Phase Assumptions

Phase: Demolition 2/9/2011 - 3/12/2011 - Type Your Description Here

Building Volume Total (cubic feet): 265881.8

Building Volume Daily (cubic feet): 8862

On Road Truck Travel (VMT): 123.08

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Level II - Construction

7/12/2010 11:42:53 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Construction.urb924

Project Name: Level II Facility-Construction

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	221.17	57.79	57.18	0.02	24.51	3.75	28.26	5.14	3.44	8.58	7,295.87

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 2/1/2011-2/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 3/1/2011-3/14/2011 Active Days: 10	5.80	39.50	25.57	0.00	24.42	2.53	26.95	5.10	2.32	7.43	3,941.62
Asphalt 03/01/2011-03/15/2011	2.91	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,583.56
Paving Off-Gas	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.03	0.58	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	90.05
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 3/15/2011-3/15/2011 Active Days: 1	10.03	57.79	57.18	0.02	24.51	3.75	28.26	5.14	3.44	8.58	7,295.87
Asphalt 03/01/2011-03/15/2011	2.91	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,583.56
Paving Off-Gas	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.03	0.58	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	90.05
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 3/16/2011-10/10/2011 Active Days: 149	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25

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Time Slice 10/11/2011-10/25/2011 Active Days: 11	221.17	18.57	35.29	0.02	0.11	1.23	1.33	0.04	1.12	1.16	3,634.44
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25
Coating 10/11/2011-11/08/2011	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Architectural Coating	216.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Time Slice 10/26/2011-11/8/2011 Active Days: 10	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Coating 10/11/2011-11/08/2011	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Architectural Coating	216.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.88

Maximum Daily Acreage Disturbed: 1.22

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 1.22

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Construction.urb924

Project Name: Level II Facility-Construction

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	221.17	57.79	57.18	0.02	24.51	3.75	28.26	5.14	3.44	8.58	7,295.87

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 2/1/2011-2/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 3/1/2011-3/14/2011 Active Days: 10	5.80	39.50	25.57	0.00	24.42	2.53	26.95	5.10	2.32	7.43	3,941.62
Asphalt 03/01/2011-03/15/2011	2.91	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,583.56
Paving Off-Gas	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.03	0.58	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	90.05
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 3/15/2011-3/15/2011 Active Days: 1	10.03	57.79	57.18	0.02	24.51	3.75	28.26	5.14	3.44	8.58	7,295.87
Asphalt 03/01/2011-03/15/2011	2.91	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,583.56
Paving Off-Gas	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.03	0.58	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	90.05
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	24.41	1.18	25.58	5.10	1.08	6.18	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.40	0.00	24.40	5.10	0.00	5.10	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 3/16/2011-10/10/2011 Active Days: 149	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25

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Time Slice 10/11/2011-10/25/2011 Active Days: 11	221.17	18.57	35.29	0.02	0.11	1.23	1.33	0.04	1.12	1.16	3,634.44
Building 03/15/2011-10/25/2011	4.23	18.29	31.61	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,354.26
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.11	1.00	0.00	0.01	0.04	0.05	0.00	0.03	0.04	226.81
Building Worker Trips	0.76	1.51	19.77	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,506.25
Coating 10/11/2011-11/08/2011	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Architectural Coating	216.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Time Slice 10/26/2011-11/8/2011 Active Days: 10	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Coating 10/11/2011-11/08/2011	216.94	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18
Architectural Coating	216.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.68	0.00	0.02	0.01	0.02	0.01	0.01	0.01	280.18

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.88

Maximum Daily Acreage Disturbed: 1.22

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

7/12/2010 11:43:01 AM

Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 1.22

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

7/12/2010 11:43:08 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Construction.urb924

Project Name: Level II Facility-Construction

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	2.68	1.93	2.86	0.00	0.39	0.12	0.51	0.08	0.11	0.20	318.22

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

7/12/2010 11:43:08 AM

2011	2.68	1.93	2.86	0.00	0.39	0.12	0.51	0.08	0.11	0.20	318.22
Fine Grading 02/01/2011-03/15/2011	0.04	0.36	0.21	0.00	0.38	0.02	0.40	0.08	0.02	0.10	36.55
Fine Grading Dust	0.00	0.00	0.00	0.00	0.38	0.00	0.38	0.08	0.00	0.08	0.00
Fine Grading Off Road Diesel	0.04	0.36	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	34.83
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
Asphalt 03/01/2011-03/15/2011	0.02	0.09	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.71
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	7.00
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Paving Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22
Building 03/15/2011-10/25/2011	0.34	1.47	2.54	0.00	0.01	0.10	0.11	0.00	0.09	0.09	270.02
Building Off Road Diesel	0.27	1.26	0.87	0.00	0.00	0.09	0.09	0.00	0.08	0.08	130.51
Building Vendor Trips	0.01	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.26
Building Worker Trips	0.06	0.12	1.59	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.25
Coating 10/11/2011-11/08/2011	2.28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94
Architectural Coating	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.88

Maximum Daily Acreage Disturbed: 1.22

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

7/12/2010 11:43:08 AM

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 1.22

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Level II - Operational

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Operational.urb924

Project Name: Level II-Operational

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.26	2.27	3.44	0.00	0.01	0.01	2,704.41

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	7.32	7.31	62.33	0.05	10.00	1.92	5,243.87

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	9.58	9.58	65.77	0.05	10.01	1.93	7,948.28

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.25	1.89	0.00	0.00	0.00	2,701.60
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	1.98						
TOTALS (lbs/day, unmitigated)	2.26	2.27	3.44	0.00	0.01	0.01	2,704.41

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	7.32	7.31	62.33	0.05	10.00	1.92	5,243.87
TOTALS (lbs/day, unmitigated)	7.32	7.31	62.33	0.05	10.00	1.92	5,243.87

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

7/12/2010 11:51:37 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.46	1000 sq ft	337.70	830.74	5,815.19
					830.74	5,815.19

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Operational.urb924

Project Name: Level II-Operational

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.14	2.25	1.89	0.00	0.00	0.00	2,701.60

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.60	9.42	70.50	0.05	10.00	1.92	4,967.63

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.74	11.67	72.39	0.05	10.00	1.92	7,669.23

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.25	1.89	0.00	0.00	0.00	2,701.60
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.98						
TOTALS (lbs/day, unmitigated)	2.14	2.25	1.89	0.00	0.00	0.00	2,701.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	6 60	9.42	70.50	0.05	10.00	1.92	4,967.63
TOTALS (lbs/day, unmitigated)	6.60	9.42	70.50	0.05	10.00	1.92	4,967.63

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

7/12/2010 11:51:47 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.46	1000 sq ft	337.70	830.74	5,815.19
					830.74	5,815.19

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: H:\Projects\10010004.01 CDCR Estella\Level II Facility_Operational.urb924

Project Name: Level II-Operational

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.41	0.41	0.60	0.00	0.00	0.00	493.50

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.29	1.46	11.87	0.01	1.83	0.35	940.20

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.70	1.87	12.47	0.01	1.83	0.35	1,433.70

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.41	0.35	0.00	0.00	0.00	493.04
Hearth							
Landscape	0.02	0.00	0.25	0.00	0.00	0.00	0.46
Consumer Products	0.00						
Architectural Coatings	0.36						
TOTALS (tons/year, unmitigated)	0.41	0.41	0.60	0.00	0.00	0.00	493.50

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	1.29	1.46	11.87	0.01	1.83	0.35	940.20
TOTALS (tons/year, unmitigated)	1.29	1.46	11.87	0.01	1.83	0.35	940.20

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

7/12/2010 11:51:56 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.46	1000 sq ft	337.70	830.74	5,815.19
					830.74	5,815.19

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

7/12/2010 11:51:56 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.0	62.5

2) Reentry						
NEW CONSTRUCTION and OPERATION						
	216000	**sq. feet**	4.95936	**acres**	216	KSF
			Total ADT	588	Trip Rate	2.722222
	Start	End				
Fine Site Grading	11/30/2007	1/11/2008				
Paving	12/28/2007	1/11/2008				
Building	1/11/2008	8/22/2008				
Coating	8/8/2008	9/5/2008				
Demo	12/8/2007	1/8/2008				
Adjusted for Jan. 1st 2011 Start Date						
	Start	End				
Fine Site Grading	1/1/2011	2/12/2011				
Paving	1/29/2011	2/12/2011				
Building	2/12/2011	9/24/2011				
Coating	9/10/2011	10/8/2011				

(Reentry/Construction + Operation

7/12/2010 1:23:13 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Reentry_Construction.urb924

Project Name: Reentry-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	224.73	39.51	35.69	0.02	24.82	2.53	27.35	5.19	2.32	7.51	3,943.09

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.48	1.46	2.76	0.00	0.01	0.01	1,730.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5.03	5.17	44.08	0.04	7.08	1.36	3,708.59

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.51	6.63	46.84	0.04	7.09	1.37	5,439.40

Construction Unmitigated Detail Report:

7/12/2010 1:23:13 PM

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/3/2011-1/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading 01/01/2011-02/12/2011	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.80	0.00	24.80	5.18	0.00	5.18	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 1/31/2011-2/11/2011 Active Days: 10	5.80	**39.51**	25.57	0.00	**24.82**	**2.53**	**27.35**	**5.19**	**2.32**	**7.51**	**3,943.09**
Asphalt 01/29/2011-02/12/2011	2.92	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,585.04
Paving Off-Gas	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.04	0.59	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	91.52
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Fine Grading 01/01/2011-02/12/2011	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.80	0.00	24.80	5.18	0.00	5.18	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 2/14/2011-9/9/2011 Active Days: 150	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building 02/12/2011-09/24/2011	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.13	1.02	0.00	0.01	0.04	0.05	0.00	0.03	0.04	230.52
Building Worker Trips	0.77	1.53	20.09	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,530.84
Time Slice 9/12/2011-9/23/2011 Active Days: 10	**224.73**	18.62	**35.69**	**0.02**	0.11	1.23	1.34	0.04	1.13	1.16	3,667.31
Building 02/12/2011-09/24/2011	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.13	1.02	0.00	0.01	0.04	0.05	0.00	0.03	0.04	230.52
Building Worker Trips	0.77	1.53	20.09	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,530.84
Coating 09/10/2011-10/08/2011	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Architectural Coating	220.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Time Slice 9/26/2011-10/7/2011 Active Days: 10	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Coating 09/10/2011-10/08/2011	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Architectural Coating	220.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75

Phase Assumptions

Phase: Fine Grading 1/1/2011 - 2/12/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.96

Maximum Daily Acreage Disturbed: 1.24

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

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On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 1/29/2011 - 2/12/2011 - Default Paving Description

Acres to be Paved: 1.24

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 2/12/2011 - 9/24/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/10/2011 - 10/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report.

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.44	1.21	0.00	0.00	0.00	1,728.00
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	1.26						
TOTALS (lbs/day, unmitigated)	1.48	1.46	2.76	0.00	0.01	0.01	1,730.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	5.03	5.17	44.08	0.04	7.08	1.36	3,708.59
TOTALS (lbs/day, unmitigated)	5.03	5.17	44.08	0.04	7.08	1.36	3,708.59

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

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Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.72	1000 sq ft	216.00	587.52	4,112.64
					587.52	4,112.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\Reentry_Construction.urb924

Project Name: Reentry-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	224.73	39.51	35.69	0.02	24.82	2.53	27.35	5.19	2.32	7.51	3,943.09

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.36	1.44	1.21	0.00	0.00	0.00	1,728.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	4.64	6.66	49.86	0.04	7.08	1.36	3,513.22

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.00	8.10	51.07	0.04	7.08	1.36	5,241.22

Construction Unmitigated Detail Report:

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CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/3/2011-1/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading 01/01/2011-02/12/2011	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.80	0.00	24.80	5.18	0.00	5.18	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 1/31/2011-2/11/2011 Active Days: 10	5.80	**39.51**	25.57	0.00	**24.82**	**2.53**	**27.35**	**5.19**	**2.32**	**7.51**	**3,943.09**
Asphalt 01/29/2011-02/12/2011	2.92	15.96	12.16	0.00	0.02	1.35	1.37	0.01	1.24	1.25	1,585.04
Paving Off-Gas	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.04	0.59	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	91.52
Paving Worker Trips	0.11	0.22	2.91	0.00	0.01	0.01	0.02	0.00	0.01	0.01	221.48
Fine Grading 01/01/2011-02/12/2011	2.88	23.55	13.41	0.00	24.81	1.18	25.98	5.18	1.08	6.26	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	24.80	0.00	24.80	5.18	0.00	5.18	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 2/14/2011-9/9/2011 Active Days: 150	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building 02/12/2011-09/24/2011	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.13	1.02	0.00	0.01	0.04	0.05	0.00	0.03	0.04	230.52
Building Worker Trips	0.77	1.53	20.09	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,530.84
Time Slice 9/12/2011-9/23/2011 Active Days: 10	**224.73**	18.62	**35.69**	**0.02**	0.11	1.23	1.34	0.04	1.13	1.16	3,667.31
Building 02/12/2011-09/24/2011	4.25	18.33	31.95	0.02	0.09	1.22	1.31	0.03	1.12	1.15	3,382.55
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.09	1.13	1.02	0.00	0.01	0.04	0.05	0.00	0.03	0.04	230.52
Building Worker Trips	0.77	1.53	20.09	0.01	0.08	0.05	0.13	0.03	0.04	0.07	1,530.84
Coating 09/10/2011-10/08/2011	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Architectural Coating	220.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Time Slice 9/26/2011-10/7/2011 Active Days: 10	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Coating 09/10/2011-10/08/2011	220.48	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75
Architectural Coating	220.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.14	0.28	3.74	0.00	0.02	0.01	0.02	0.01	0.01	0.01	284.75

Phase Assumptions

Phase: Fine Grading 1/1/2011 - 2/12/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.96

Maximum Daily Acreage Disturbed: 1.24

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

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On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 1/29/2011 - 2/12/2011 - Default Paving Description

Acres to be Paved: 1.24

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 2/12/2011 - 9/24/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/10/2011 - 10/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.44	1.21	0.00	0.00	0.00	1,728.00
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.26						
TOTALS (lbs/day, unmitigated)	1.36	1.44	1.21	0.00	0.00	0.00	1,728.00

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	4.64	6.66	49.86	0.04	7.08	1.36	3,513.22
TOTALS (lbs/day, unmitigated)	4.64	6.66	49.86	0.04	7.08	1.36	3,513.22

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

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Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.72	1000 sq ft	216.00	587.52	4,112.64
					587.52	4,112.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: H:\Projects\10010004.01 CDCR Estella\Reentry_Construction.urb924

Project Name: Reentry-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	2.60	1.90	2.86	0.00	0.38	0.12	0.50	0.08	0.11	0.19	316.75

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.27	0.26	0.47	0.00	0.00	0.00	315.82

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.89	1.03	8.40	0.01	1.29	0.25	664.93

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.16	1.29	8.87	0.01	1.29	0.25	980.75

Construction Unmitigated Detail Report:

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CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011	2.60	1.90	2.86	0.00	0.38	0.12	0.50	0.08	0.11	0.19	316.75
Fine Grading 01/01/2011-02/12/2011	0.04	0.35	0.20	0.00	0.37	0.02	0.39	0.08	0.02	0.09	35.37
Fine Grading Dust	0.00	0.00	0.00	0.00	0.37	0.00	0.37	0.08	0.00	0.08	0.00
Fine Grading Off Road Diesel	0.04	0.35	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	33.71
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
Asphalt 01/29/2011-02/12/2011	0.01	0.08	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	7.93
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	6.36
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
Building 02/12/2011-09/24/2011	0.34	1.47	2.56	0.00	0.01	0.10	0.11	0.00	0.09	0.09	270.60
Building Off Road Diesel	0.27	1.25	0.87	0.00	0.00	0.09	0.09	0.00	0.08	0.08	129.70
Building Vendor Trips	0.01	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.44
Building Worker Trips	0.06	0.12	1.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.47
Coating 09/10/2011-10/08/2011	2.20	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.85
Architectural Coating	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.85

Phase Assumptions

Phase: Fine Grading 1/1/2011 - 2/12/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 4.96

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Maximum Daily Acreage Disturbed: 1.24

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 1/29/2011 - 2/12/2011 - Default Paving Description

Acres to be Paved: 1.24

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 2/12/2011 - 9/24/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/10/2011 - 10/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

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Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.02	0.26	0.22	0.00	0.00	0.00	315.36
Hearth							
Landscape	0.02	0.00	0.25	0.00	0.00	0.00	0.46
Consumer Products	0.00						
Architectural Coatings	0.23						
TOTALS (tons/year, unmitigated)	0.27	0.26	0.47	0.00	0.00	0.00	315.82

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	0.89	1.03	8.40	0.01	1.29	0.25	664.93
TOTALS (tons/year, unmitigated)	0.89	1.03	8.40	0.01	1.29	0.25	664.93

Operational Settings:

Does not include correction for passby trips

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Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		2.72	1000 sq ft	216.00	587.52	4,112.64
					587.52	4,112.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18 0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

3)CalFire Camp						
NEW CONSTRUCTION and OPERATION						
	64668	**sq. feet**	1.484777	**acres**	64.668	KSF
			Total ADT	54	Trip Rate	0.835034
	Start	End				
Fine Site Grading	11/30/2007	1/11/2008				
Paving	12/28/2007	1/11/2008				
Building	1/11/2008	8/22/2008				
Coating	8/8/2008	9/5/2008				
Demo	12/8/2007	1/8/2008				
Adjusted for Feb. 1st 2011 Start Date						
	Start	End				
Fine Site Grading	2/1/2011	3/15/2011				
Paving	3/1/2011	3/15/2011				
Building	3/15/2011	10/25/2011				
Coating	10/11/2011	11/8/2011				

CalFire - Construction

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\CalFire Camp_Construction.urb924

Project Name: CalFire-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	67.41	44.48	33.91	0.01	7.45	2.73	10.18	1.56	2.51	4.07	4,979.36

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.53	0.45	1.91	0.00	0.01	0.01	520.41

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.75	0.47	4.03	0.00	0.65	0.12	338.98

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.28	0.92	5.94	0.00	0.66	0.13	859.39

Construction Unmitigated Detail Report:

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CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO
Time Slice 2/1/2011-2/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.0
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.0
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.0
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.3
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.7
Time Slice 3/1/2011-3/14/2011 Active Days: 10	4.91	35.17	22.91	0.00	7.42	2.16	9.58	1.55	1.99	3.54	3,558.3
Asphalt 03/01/2011-03/15/2011	2.02	11.63	9.50	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,200.3
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.2
Paving On Road Diesel	0.01	0.18	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.3
Paving Worker Trips	0.10	0.19	2.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.7
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.0
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.0
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.3
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.7

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Time Slice 3/15/2011-3/15/2011 Active Days: 1	6.28	44.48	33.91	0.01	7.45	2.73	10.18	1.56	2.51	4.07	4,979.36
Asphalt 03/01/2011-03/15/2011	2.02	11.63	9.50	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,200.33
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.18	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.31
Paving Worker Trips	0.10	0.19	2.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.79
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 3/16/2011-10/10/2011 Active Days: 149	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54

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Time Slice 10/11/2011-10/25/2011 Active Days: 11	**67.41**	9.39	12.12	0.01	0.03	0.57	0.60	0.01	0.52	0.54	1,506.27
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54
Coating 10/11/2011-11/08/2011	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Architectural Coating	66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Time Slice 10/26/2011-11/8/2011 Active Days: 10	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Coating 10/11/2011-11/08/2011	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Architectural Coating	66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.48

Maximum Daily Acreage Disturbed: 0.37

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 0.37

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.43	0.36	0.00	0.00	0.00	517.60
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.38						
TOTALS (lbs/day, unmitigated)	0.53	0.45	1.91	0.00	0.01	0.01	520.41

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	0.75	0.47	4.03	0.00	0.65	0.12	338.98
TOTALS (lbs/day, unmitigated)	0.75	0.47	4.03	0.00	0.65	0.12	338.98

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

7/12/2010 1:30:56 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		0.83	1000 sq ft	64.70	53.70	375.91
					53.70	375.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				26.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: H:\Projects\10010004.01 CDCR Estella\CalFire Camp_Construction.urb924

Project Name: CalFire-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	67.41	44.48	33.91	0.01	7.45	2.73	10.18	1.56	2.51	4.07	4,979.36

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.41	0.43	0.36	0.00	0.00	0.00	517.60

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.47	0.61	4.56	0.00	0.65	0.12	321.12

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.88	1.04	4.92	0.00	0.65	0.12	838.72

Construction Unmitigated Detail Report:

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CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 2/1/2011-2/28/2011 Active Days: 20	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.06
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 3/1/2011-3/14/2011 Active Days: 10	4.91	35.17	22.91	0.00	7.42	2.16	9.58	1.55	1.99	3.54	3,558.38
Asphalt 03/01/2011-03/15/2011	2.02	11.63	9.50	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,200.33
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.18	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.31
Paving Worker Trips	0.10	0.19	2.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.79
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 3/15/2011-3/15/2011 Active Days: 1	6.28	44.48	33.91	0.01	7.45	2.73	10.18	1.56	2.51	4.07	4,979.36
Asphalt 03/01/2011-03/15/2011	2.02	11.63	9.50	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,200.33
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.18	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.31
Paving Worker Trips	0.10	0.19	2.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.79
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54
Fine Grading 02/01/2011-03/15/2011	2.88	23.55	13.41	0.00	7.41	1.18	8.58	1.55	1.08	2.63	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	7.40	0.00	7.40	1.55	0.00	1.55	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74
Time Slice 3/16/2011-10/10/2011 Active Days: 149	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54

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Time Slice 10/11/2011-10/25/2011 Active Days: 11	67.41	9.39	12.12	0.01	0.03	0.57	0.60	0.01	0.52	0.54	1,506.27
Building 03/15/2011-10/25/2011	1.37	9.30	11.00	0.00	0.03	0.57	0.60	0.01	0.52	0.53	1,420.98
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.03	0.34	0.30	0.00	0.00	0.01	0.01	0.00	0.01	0.01	69.05
Building Worker Trips	0.23	0.46	6.02	0.00	0.02	0.01	0.04	0.01	0.01	0.02	458.54
Coating 10/11/2011-11/08/2011	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Architectural Coating	66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Time Slice 10/26/2011-11/8/2011 Active Days: 10	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Coating 10/11/2011-11/08/2011	66.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29
Architectural Coating	66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.09	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.29

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.48

Maximum Daily Acreage Disturbed: 0.37

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 0.37

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.43	0.36	0.00	0.00	0.00	517.60
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.38						
TOTALS (lbs/day, unmitigated)	0.41	0.43	0.36	0.00	0.00	0.00	517.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	0.47	0.61	4.56	0.00	0.65	0.12	321.12
TOTALS (lbs/day, unmitigated)	0.47	0.61	4.56	0.00	0.65	0.12	321.12

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		0.83	1000 sq ft	64.70	53.70	375.91
					53.70	375.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: H:\Projects\10010004.01 CDCR Estella\CalFire Camp_Construction.urb924

Project Name: CalFire-Construction and Operation

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	0.86	1.18	1.16	0.00	0.12	0.07	0.19	0.02	0.06	0.09	158.44

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.10	0.08	0.32	0.00	0.00	0.00	94.92

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.12	0.09	0.77	0.00	0.12	0.02	60.78

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.22	0.17	1.09	0.00	0.12	0.02	155.70

Construction Unmitigated Detail Report:

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CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011	0.86	1.18	1.16	0.00	0.12	0.07	0.19	0.02	0.06	0.09	158.44
Fine Grading 02/01/2011-03/15/2011	0.04	0.36	0.21	0.00	0.11	0.02	0.13	0.02	0.02	0.04	36.55
Fine Grading Dust	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.02	0.00	0.02	0.00
Fine Grading Off Road Diesel	0.04	0.36	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	34.83
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
Asphalt 03/01/2011-03/15/2011	0.01	0.06	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	6.60
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.01	0.01	0.00	0.00	0.00	5.39
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
Building 03/15/2011-10/25/2011	0.11	0.75	0.89	0.00	0.00	0.05	0.05	0.00	0.04	0.04	114.39
Building Off Road Diesel	0.09	0.68	0.38	0.00	0.00	0.04	0.04	0.00	0.04	0.04	71.92
Building Vendor Trips	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.56
Building Worker Trips	0.02	0.04	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.91
Coating 10/11/2011-11/08/2011	0.69	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
Architectural Coating	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90

Phase Assumptions

Phase: Fine Grading 2/1/2011 - 3/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.48

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Maximum Daily Acreage Disturbed: 0.37

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 3/1/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 0.37

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 3/15/2011 - 10/25/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/11/2011 - 11/8/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 150

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.08	0.07	0.00	0.00	0.00	94.46
Hearth							
Landscape	0.02	0.00	0.25	0.00	0.00	0.00	0.46
Consumer Products	0.00						
Architectural Coatings	0.07						
TOTALS (tons/year, unmitigated)	0.10	0.08	0.32	0.00	0.00	0.00	94.92

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hospital	0.12	0.09	0.77	0.00	0.12	0.02	60.78
TOTALS (tons/year, unmitigated)	0.12	0.09	0.77	0.00	0.12	0.02	60.78

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

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Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hospital		0.83	1000 sq ft	64.70	53.70	375.91
					53.70	375.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

CDCR Estrella GHG Emissions Modeling

URBEMIS GHG Emissions Modeling Results

Construction Emissions	tons/yr	MT/yr	Duration of Construction (years)	Total (MT)	MT/yr amortized (25 years)
URBEMIS output	808	733	1	733	29

Area-Source Emissions	tons/yr	MT/yr
URBEMIS output	904	820

Mobile-Source Emissions	tons/yr	MT/yr
URBEMIS output	1,761	1,597

	Level II	Reentry	Calfire	Total
Construction	12	11	6	29
Operational (Direct)	1300	890	227	2417
Operational (InDirect)	4035.043	2580.883	772.6877	7388.614
				9834.614

Indirect GHG Emissions Modeling Results

Indirect Emissions from Electricity Consumption 1

MWh/yr	Region	Emission Factor (lb CO2/MWh)	GWP	Emission Factor (lb CH4/MWh)	GWP	Emission Factor (lb N2O/MWh)	GWP	Total CO2e (Metric Tons/year)
21,915	CAMX	724.12	1	0.0302	23	0.0081	296	7,229

Building Square Footage Assumptions		Electricity Demand (MW)	
Level II facility:	337,702	2.5	0.546116403
Reentry:	216,000		0.349305432
CalFire Camp:	64,668		0.104578165

Indirect Emissions from Water Use (Includes conveyance, treatment, distribution, and wastewater treatment) 1,2

mgd	KWh/million gallons*	Mg/year	Total KWh/yr	MWh/yr	Region	Emission Factor (lb CO2/MWh)	GWP	Emission Factor (lb CH4/MWh)	GWP	Emission Factor (lb N2O/MWh)	GWP	Total CO2e (Metric Tons/year)	Water Demand (AFY)
0.25	5,411	90	484,826	485	CAMX	724.12	1	0.0302	23	0.0081	296	160	320

*Indoor use in Northern California

Total Operational GHG Emissions (MT/yr) 9,835

Sources:

1 California Climate Action Registry (CCAR) General Reporting Protocol v 3.1 January 2009. Appendix C. http://www.climateregistry.org/resources/docs/protocols/grp/GRP_3.1_January2009.pdf

2 California Energy Commission (CEC) 2006 (December). Refining Estimates of Water-Related Energy Use in California. CEC-500-2006-118

Conversion Factors:

1	ton	0.907	MT	2204.62 lb
1	AF	0.28	mg	
1	yr	365	days	
1	MW	8765.81277	MWh/yr	

APPENDIX D

Noise Modeling Results

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing No Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : Ldn
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	SR 46 E	US 101 SB Ramp	the West	16630	55	100	96.3	2.6	1.1	80		20	
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	20700	55	100	96.2	2.6	1.2	80		20	
3	SR 46 E	Buena Vista Drive	Golden Hill Road	19280	55	100	91.4	3	5.6	80		20	
4	SR 46 E	Golden Hill Road	Union Road	15920	55	100	91.4	3	5.6	80		20	
5	SR 46 E	Union Road	Airport Road	20260	55	100	88.5	4	7.5	80		20	
6	SR 46 E	Airport Road	Dry Creek Road	15360	55	100	88.5	4	7.5	80		20	
7	SR 46 E	Dry Creek Road	the East	10800	55	100	83	5.9	11.1	80		20	
8	Dry Creek Road	SR 46 E	Airport Road	3690	30	100	97.5	1.5	1	87		13	
	Dry Creek Road	Airport Road	the West	0	30	100		1.5	1	87			
10	Golden Hill Road	Union Road	the South	7960	30	100	97.5	1.5	1	87		13	
11	Buena Vista Drive	SR 46 E	the North	5530	30	100	97.5	1.5	1	87		13	
12	Golden Hill Road	SR 46 E	the North	4340	30	100	97.5	1.5	1	87		13	
13	Golden Hill Road	SR 46 E	Union Road	6260	30	100	97.5	1.5	1	87		13	
14	Union Road	SR 46 E	Golden Hill Road	5100	30	100	97.5	1.5	1	87		13	
15	Union Road	Golden Hill Road	the West	3760	30	100	97.5	1.5	1	87		13	
16	Airport Road	SR 46 E	Dry Creek Road	5380	30	100	97.5	1.5	1	87		13	
17	Airport Road	Dry Creek Road	the North	3620	30	100	97.5	1.5	1	87		13	

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing No Project
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 46 E	US 101 SB Ramp	the West	66.9	58.3	58.5	68.0	74	159	342	737	1588
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	67.9	59.3	59.9	69.0	86	185	398	858	1849
3	SR 46 E	Buena Vista Drive	Golden Hill Road	67.3	59.6	66.3	70.2	104	223	481	1037	2234
4	SR 46 E	Golden Hill Road	Union Road	66.5	58.8	65.4	69.4	91	197	424	913	1966
5	SR 46 E	Union Road	Airport Road	67.4	61.1	67.7	71.1	118	253	545	1175	2532
6	SR 46 E	Airport Road	Dry Creek Road	66.2	59.9	66.5	69.8	98	211	454	977	2105
7	SR 46 E	Dry Creek Road	the East	64.4	60.0	66.7	69.3	89	193	415	894	1926
8	Dry Creek Road	SR 46 E	Airport Road	51.8	44.2	49.6	54.3	9	19	41	89	192
	Dry Creek Road	Airport Road	the West									
10	Golden Hill Road	Union Road	the South	55.1	47.5	52.9	57.6	15	32	69	149	321
11	Buena Vista Drive	SR 46 E	the North	53.5	46.0	51.3	56.0	12	25	54	117	252
12	Golden Hill Road	SR 46 E	the North	52.5	44.9	50.3	55.0	10	21	46	99	214
13	Golden Hill Road	SR 46 E	Union Road	54.1	46.5	51.9	56.6	13	27	59	127	273
14	Union Road	SR 46 E	Golden Hill Road	53.2	45.6	51.0	55.7	11	24	51	111	239
15	Union Road	Golden Hill Road	the West	51.8	44.3	49.6	54.3	9	19	42	90	195
16	Airport Road	SR 46 E	Dry Creek Road	53.4	45.8	51.2	55.9	11	25	53	115	247
17	Airport Road	Dry Creek Road	the North	51.7	44.1	49.5	54.2	9	19	41	88	190

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing Plus Estrella and CalFire
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : Ldn
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	SR 46 E	US 101 SB Ramp	the West	16930	55	100	96.3	2.6	1.1	80		20	
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	21690	55	100	96.2	2.6	1.2	80		20	
3	SR 46 E	Buena Vista Drive	Golden Hill Road	20340	55	100	91.4	3	5.6	80		20	
4	SR 46 E	Golden Hill Road	Union Road	17050	55	100	91.4	3	5.6	80		20	
5	SR 46 E	Union Road	Airport Road	21770	55	100	88.5	4	7.5	80		20	
6	SR 46 E	Airport Road	Dry Creek Road	15360	55	100	88.5	4	7.5	80		20	
7	SR 46 E	Dry Creek Road	the East	10820	55	100	83	5.9	11.1	80		20	
8	Dry Creek Road	SR 46 E	Airport Road	3710	30	100	97.5	1.5	1	87		13	
9	Dry Creek Road	Airport Road	the West	1480	30	100	97.5	1.5	1	87		13	
10	Golden Hill Road	Union Road	the South	8220	30	100	97.5	1.5	1	87		13	
11	Buena Vista Drive	SR 46 E	the North	5590	30	100	97.5	1.5	1	87		13	
12	Golden Hill Road	SR 46 E	the North	4370	30	100	97.5	1.5	1	87		13	
13	Golden Hill Road	SR 46 E	Union Road	6300	30	100	97.5	1.5	1	87		13	
14	Union Road	SR 46 E	Golden Hill Road	5480	30	100	97.5	1.5	1	87		13	
15	Union Road	Golden Hill Road	the West	3940	30	100	97.5	1.5	1	87		13	
16	Airport Road	SR 46 E	Dry Creek Road	6900	30	100	97.5	1.5	1	87		13	
17	Airport Road	Dry Creek Road	the North	3750	30	100	97.5	1.5	1	87		13	

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing Plus Estrella and CalFire
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 46 E	US 101 SB Ramp	the West	67.0	58.4	58.6	68.1	75	161	346	746	1607
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	68.1	59.5	60.1	69.2	89	191	411	885	1907
3	SR 46 E	Buena Vista Drive	Golden Hill Road	67.6	59.8	66.5	70.5	107	232	499	1075	2315
4	SR 46 E	Golden Hill Road	Union Road	66.8	59.1	65.7	69.7	96	206	443	955	2058
5	SR 46 E	Union Road	Airport Road	67.7	61.4	68.1	71.4	123	266	572	1233	2656
6	SR 46 E	Airport Road	Dry Creek Road	66.2	59.9	66.5	69.8	98	211	454	977	2105
7	SR 46 E	Dry Creek Road	the East	64.4	60.0	66.7	69.3	90	193	415	895	1928
8	Dry Creek Road	SR 46 E	Airport Road	51.8	44.2	49.6	54.3	9	19	42	90	193
9	Dry Creek Road	Airport Road	the West	47.8	40.2	45.6	50.3	5	10	23	49	105
10	Golden Hill Road	Union Road	the South	55.2	47.7	53.0	57.7	15	33	71	152	328
11	Buena Vista Drive	SR 46 E	the North	53.6	46.0	51.4	56.1	12	25	55	118	254
12	Golden Hill Road	SR 46 E	the North	52.5	44.9	50.3	55.0	10	22	46	100	215
13	Golden Hill Road	SR 46 E	Union Road	54.1	46.5	51.9	56.6	13	27	59	127	275
14	Union Road	SR 46 E	Golden Hill Road	53.5	45.9	51.3	56.0	12	25	54	116	250
15	Union Road	Golden Hill Road	the West	52.0	44.5	49.8	54.5	9	20	43	93	201
16	Airport Road	SR 46 E	Dry Creek Road	54.5	46.9	52.3	57.0	14	29	63	135	292
17	Airport Road	Dry Creek Road	the North	51.8	44.3	49.6	54.3	9	19	42	90	194

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing Plus Estrella, CalFire and Re-Entry
Ground Type : Soft **K Factor :**
Metric (L_{eq}, L_{dn}, CNEL) : Ldn **Traffic Desc. (Peak or ADT) :** ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	SR 46 E	US 101 SB Ramp	the West	17250	55	100	96.3	2.6	1.1	80		20	
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	22710	55	100	96.2	2.6	1.2	80		20	
3	SR 46 E	Buena Vista Drive	Golden Hill Road	23790	55	100	91.4	3	5.6	80		20	
4	SR 46 E	Golden Hill Road	Union Road	18210	55	100	91.4	3	5.6	80		20	
5	SR 46 E	Union Road	Airport Road	23330	55	100	88.5	4	7.5	80		20	
6	SR 46 E	Airport Road	Dry Creek Road	15360	55	100	88.5	4	7.5	80		20	
7	SR 46 E	Dry Creek Road	the East	10830	55	100	83	5.9	11.1	80		20	
8	Dry Creek Road	SR 46 E	Airport Road	3720	30	100	97.5	1.5	1	87		13	
9	Dry Creek Road	Airport Road	the West	1480	30	100	97.5	1.5	1	87		13	
10	Golden Hill Road	Union Road	the South	8470	30	100	97.5	1.5	1	87		13	
11	Buena Vista Drive	SR 46 E	the North	5660	30	100	97.5	1.5	1	87		13	
12	Golden Hill Road	SR 46 E	the North	4400	30	100	97.5	1.5	1	87		13	
13	Golden Hill Road	SR 46 E	Union Road	6350	30	100	97.5	1.5	1	87		13	
14	Union Road	SR 46 E	Golden Hill Road	5880	30	100	97.5	1.5	1	87		13	
15	Union Road	Golden Hill Road	the West	4120	30	100	97.5	1.5	1	87		13	
16	Airport Road	SR 46 E	Dry Creek Road	8450	30	100	97.5	1.5	1	87		13	
17	Airport Road	Dry Creek Road	the North	5330	30	100	97.5	1.5	1	87		13	

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Existing Plus Estrella, CalFire and Re-Entry
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 46 E	US 101 SB Ramp	the West	67.1	58.5	58.7	68.2	76	163	351	755	1627
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	68.3	59.7	60.3	69.4	91	197	424	913	1967
3	SR 46 E	Buena Vista Drive	Golden Hill Road	68.3	60.5	67.2	71.1	119	257	554	1193	2570
4	SR 46 E	Golden Hill Road	Union Road	67.1	59.4	66.0	70.0	100	215	463	998	2151
5	SR 46 E	Union Road	Airport Road	68.0	61.7	68.4	71.7	129	278	599	1291	2782
6	SR 46 E	Airport Road	Dry Creek Road	66.2	59.9	66.5	69.8	98	211	454	977	2105
7	SR 46 E	Dry Creek Road	the East	64.4	60.0	66.7	69.3	90	193	416	896	1930
8	Dry Creek Road	SR 46 E	Airport Road	51.8	44.2	49.6	54.3	9	19	42	90	193
9	Dry Creek Road	Airport Road	the West	47.8	40.2	45.6	50.3	5	10	23	49	105
10	Golden Hill Road	Union Road	the South	55.4	47.8	53.2	57.9	16	33	72	155	334
11	Buena Vista Drive	SR 46 E	the North	53.6	46.1	51.4	56.1	12	26	55	119	256
12	Golden Hill Road	SR 46 E	the North	52.5	45.0	50.3	55.0	10	22	47	100	216
13	Golden Hill Road	SR 46 E	Union Road	54.1	46.6	51.9	56.6	13	28	59	128	276
14	Union Road	SR 46 E	Golden Hill Road	53.8	46.2	51.6	56.3	12	26	57	122	262
15	Union Road	Golden Hill Road	the West	52.2	44.7	50.0	54.7	10	21	45	96	207
16	Airport Road	SR 46 E	Dry Creek Road	55.4	47.8	53.2	57.9	16	33	72	155	334
17	Airport Road	Dry Creek Road	the North	53.4	45.8	51.2	55.9	11	25	53	114	246

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Cumulative No Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : Ldn
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	SR 46 E	US 101 SB Ramp	the West	22200	55	100	96.3	2.6	1.1	80		20	
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	32500	55	100	96.2	2.6	1.2	80		20	
3	SR 46 E	Buena Vista Drive	Golden Hill Road	29700	55	100	91.4	3	5.6	80		20	
4	SR 46 E	Golden Hill Road	Union Road	26400	55	100	91.4	3	5.6	80		20	
5	SR 46 E	Union Road	Airport Road	34200	55	100	88.5	4	7.5	80		20	
6	SR 46 E	Airport Road	Dry Creek Road	25500	55	100	88.5	4	7.5	80		20	
7	SR 46 E	Dry Creek Road	the East	21900	55	100	83	5.9	11.1	80		20	
8	Dry Creek Road	SR 46 E	Airport Road	4800	30	100	97.5	1.5	1	87		13	
	Dry Creek Road	Airport Road	the West	0	30	100		1.5	1	87			
10	Golden Hill Road	Union Road	the South	16700	30	100	97.5	1.5	1	87		13	
11	Buena Vista Drive	SR 46 E	the North	7200	30	100	97.5	1.5	1	87		13	
12	Golden Hill Road	SR 46 E	the North	14300	30	100	97.5	1.5	1	87		13	
13	Golden Hill Road	SR 46 E	Union Road	11200	30	100	97.5	1.5	1	87		13	
14	Union Road	SR 46 E	Golden Hill Road	16400	30	100	97.5	1.5	1	87		13	
15	Union Road	Golden Hill Road	the West	7400	30	100	97.5	1.5	1	87		13	
16	Airport Road	SR 46 E	Dry Creek Road	8600	30	100	97.5	1.5	1	87		13	
17	Airport Road	Dry Creek Road	the North	4100	30	100	97.5	1.5	1	87		13	

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Cumulative No Project
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 46 E	US 101 SB Ramp	the West	68.2	59.6	59.8	69.3	89	193	415	894	1925
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	69.8	61.3	61.8	71.0	116	250	538	1159	2498
3	SR 46 E	Buena Vista Drive	Golden Hill Road	69.2	61.5	68.1	72.1	138	298	642	1383	2980
4	SR 46 E	Golden Hill Road	Union Road	68.7	61.0	67.6	71.6	128	275	593	1279	2755
5	SR 46 E	Union Road	Airport Road	69.7	63.3	70.0	73.3	167	359	773	1666	3589
6	SR 46 E	Airport Road	Dry Creek Road	68.4	62.1	68.7	72.1	137	295	636	1370	2951
7	SR 46 E	Dry Creek Road	the East	67.5	63.1	69.8	72.3	143	309	665	1432	3086
8	Dry Creek Road	SR 46 E	Airport Road	52.9	45.3	50.7	55.4	11	23	49	106	229
	Dry Creek Road	Airport Road	the West									
10	Golden Hill Road	Union Road	the South	58.3	50.8	56.1	60.8	24	53	113	244	526
11	Buena Vista Drive	SR 46 E	the North	54.7	47.1	52.5	57.2	14	30	65	139	300
12	Golden Hill Road	SR 46 E	the North	57.6	50.1	55.4	60.1	22	47	102	220	474
13	Golden Hill Road	SR 46 E	Union Road	56.6	49.0	54.4	59.1	19	40	87	187	403
14	Union Road	SR 46 E	Golden Hill Road	58.2	50.7	56.0	60.7	24	52	112	241	520
15	Union Road	Golden Hill Road	the West	54.8	47.2	52.6	57.3	14	31	66	142	306
16	Airport Road	SR 46 E	Dry Creek Road	55.4	47.9	53.2	57.9	16	34	73	157	338
17	Airport Road	Dry Creek Road	the North	52.2	44.7	50.0	54.7	10	21	44	96	206

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Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

AECOM

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Cumulative Plus Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : Ldn
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	SR 46 E	US 101 SB Ramp	the West	22820	55	100	96.3	2.6	1.1	80		20	
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	34510	55	100	96.2	2.6	1.2	80		20	
3	SR 46 E	Buena Vista Drive	Golden Hill Road	31850	55	100	91.4	3	5.6	80		20	
4	SR 46 E	Golden Hill Road	Union Road	28690	55	100	91.4	3	5.6	80		20	
5	SR 46 E	Union Road	Airport Road	37270	55	100	88.5	4	7.5	80		20	
6	SR 46 E	Airport Road	Dry Creek Road	25500	55	100	88.5	4	7.5	80		20	
7	SR 46 E	Dry Creek Road	the East	21930	55	100	83	5.9	11.1	80		20	
8	Dry Creek Road	SR 46 E	Airport Road	4830	30	100	97.5	1.5	1	87		13	
9	Dry Creek Road	Airport Road	the West	1480	30	100	97.5	1.5	1	87		13	
10	Golden Hill Road	Union Road	the South	17210	30	100	97.5	1.5	1	87		13	
11	Buena Vista Drive	SR 46 E	the North	7330	30	100	97.5	1.5	1	87		13	
12	Golden Hill Road	SR 46 E	the North	14360	30	100	97.5	1.5	1	87		13	
13	Golden Hill Road	SR 46 E	Union Road	11290	30	100	97.5	1.5	1	87		13	
14	Union Road	SR 46 E	Golden Hill Road	17180	30	100	97.5	1.5	1	87		13	
15	Union Road	Golden Hill Road	the West	7760	30	100	97.5	1.5	1	87		13	
16	Airport Road	SR 46 E	Dry Creek Road	11670	30	100	97.5	1.5	1	87		13	
17	Airport Road	Dry Creek Road	the North	5810	30	100	97.5	1.5	1	87		13	

Appendix D

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : CDCR Estrella
Project Number : 08110101.04
Modeling Condition : Cumulative Plus Project
Metric (Leq, Ldn, CNEL) : Ldn

		Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 46 E	US 101 SB Ramp	the West	68.3	59.7	59.9	69.4	91	196	422	910	1961
2	SR 46 E	US 101 NB Ramp	Buena Vista Drive	70.1	61.5	62.1	71.2	121	260	560	1207	2600
3	SR 46 E	Buena Vista Drive	Golden Hill Road	69.5	61.8	68.4	72.4	145	312	673	1449	3122
4	SR 46 E	Golden Hill Road	Union Road	69.1	61.3	68.0	72.0	135	291	627	1352	2912
5	SR 46 E	Union Road	Airport Road	70.1	63.7	70.4	73.7	176	380	819	1764	3801
6	SR 46 E	Airport Road	Dry Creek Road	68.4	62.1	68.7	72.1	137	295	636	1370	2951
7	SR 46 E	Dry Creek Road	the East	67.5	63.1	69.8	72.3	143	309	665	1433	3088
8	Dry Creek Road	SR 46 E	Airport Road	52.9	45.4	50.7	55.4	11	23	50	107	230
9	Dry Creek Road	Airport Road	the West	47.8	40.2	45.6	50.3	5	10	23	49	105
10	Golden Hill Road	Union Road	the South	58.4	50.9	56.3	60.9	25	54	116	249	537
11	Buena Vista Drive	SR 46 E	the North	54.7	47.2	52.5	57.2	14	30	65	141	304
12	Golden Hill Road	SR 46 E	the North	57.7	50.1	55.5	60.2	22	48	102	221	476
13	Golden Hill Road	SR 46 E	Union Road	56.6	49.1	54.4	59.1	19	41	87	188	405
14	Union Road	SR 46 E	Golden Hill Road	58.4	50.9	56.2	60.9	25	54	115	249	536
15	Union Road	Golden Hill Road	the West	55.0	47.4	52.8	57.5	15	32	68	146	316
16	Airport Road	SR 46 E	Dry Creek Road	56.8	49.2	54.6	59.3	19	41	89	192	414
17	Airport Road	Dry Creek Road	the North	53.7	46.2	51.5	56.2	12	26	56	121	260

Appendix D

Roadway	From	To	Existing No Project	Contours 70 dB	Contours 65 dB
SR 46 E	US 101 SB Ramp	the West	68.0	74	159
SR 46 E	US 101 NB Ramp	Buena Vista Drive	69.0	86	185
SR 46 E	Buena Vista Drive	Golden Hill Road	70.2	104	223
SR 46 E	Golden Hill Road	Union Road	69.4	91	197
SR 46 E	Union Road	Airport Road	71.1	118	253
SR 46 E	Airport Road	Dry Creek Road	69.8	98	211
SR 46 E	Dry Creek Road	the East	69.3	89	193
Dry Creek Road	SR 46 E	Airport Road	54.3	9	19
Dry Creek Road	Airport Road	the West	0.0		
Golden Hill Road	Union Road	the South	57.6	15	32
Buena Vista Drive	SR 46 E	the North	56.0	12	25
Golden Hill Road	SR 46 E	the North	55.0	10	21
Golden Hill Road	SR 46 E	Union Road	56.6	13	27
Union Road	SR 46 E	Golden Hill Road	55.7	11	24
Union Road	Golden Hill Road	the West	54.3	9	19
Airport Road	SR 46 E	Dry Creek Road	55.9	11	25
Airport Road	Dry Creek Road	the North	54.2	9	19

60 dB	Existing Plus Estrella+ CalFire	Change	Existing Plus Estrella+ CalFire+Re-Entry	Change	Cumulative No Project	Cumulative Plus Project	Change
342	68.1	0.1	68.2	0.2	69.3	69.4	0.1
398	69.2	0.2	69.4	0.4	71.0	71.2	0.3
481	70.5	0.2	71.1	0.9	72.1	72.4	0.3
424	69.7	0.3	70.0	0.6	71.6	72.0	0.4
545	71.4	0.3	71.7	0.6	73.3	73.7	0.4
454	69.8	0.0	69.8	0.0	72.1	72.1	0.0
415	69.3	0.0	69.3	0.0	72.3	72.3	0.0
41	54.3	0.0	54.3	0.0	55.4	55.4	0.0
	50.3	50.3	50.3	50.3	0.0	50.3	50.3
69	57.7	0.1	57.9	0.3	60.8	60.9	0.1
54	56.1	0.0	56.1	0.1	57.2	57.2	0.1
46	55.0	0.0	55.0	0.1	60.1	60.2	0.0
59	56.6	0.0	56.6	0.1	59.1	59.1	0.0
51	56.0	0.3	56.3	0.6	60.7	60.9	0.2
42	54.5	0.2	54.7	0.4	57.3	57.5	0.2
53	57.0	1.1	57.9	2.0	57.9	59.3	1.3
41	54.3	0.2	55.9	1.7	54.7	56.2	1.5

Appendix D

Project-Generated Parking Lot Noise Prediction Model

CDCR Estrella

Ref SEL: 71 **Metric: Leq**

Description	# of Stalls	Trip Multiplier	Trips /Period	Lp @ 50'	Distance to Rec.	Shielding Offset	Lp at Rec.	Energy @ Rec.
PL1 (Estrella Level II) western staff	300	1	300	60.2	1750		29.3	849.15147
PL1b (Estrella Level II) western visitor	35	1	35	50.8	1750		20.0	99.067672
PL1c (Estrella Level II) eastern	50	1	50	52.4	1750		21.5	141.52525
PL2 (CalFire)	28	1	28	49.9	1150		22.6	183.52801
PL3 (Reentry)	300	1	300	60.2	750		36.6	4623.158
	713							1
			713					

Combined Noise Level: 37.7 dBA Leq **5897.4304**

Appendix XX

Project-Generated Parking Lot Noise Prediction Model

CDCR Paso Robles

Ref SEL: 71 **Metric: Leq**

Description	# of Stalls	Trip Multiplier	Trips /Period	Lp @ 50'	Distance to Rec.	Shielding Offset	Lp at Rec.	Energy @ Rec.
PL1 (Estrella Level II) western staff	300	1	300	60.2	1750		29.3	849.15147
PL1b (Estrella Level II) western visitor	35	1	35	50.8	1750		20.0	99.067672
PL1c (Estrella Level II) eastern	50	1	50	52.4	1750		21.5	141.52525
PL2 (CalFire)	28	1	28	49.9	1150		22.6	183.52801
	413							1
			413					

Combined Noise Level: 31.1 dBA Leq **1274.2724**

Appendix XX

Project-Generated Parking Lot Noise Prediction Model

CDCR Paso Robles

Ref SEL: 71 **Metric: Leq**

Description	# of Stalls	Trip Multiplier	Trips /Period	Lp @ 50'	Distance to Rec.	Shielding Offset	Lp at Rec.	Energy @ Rec.
PL1 (Estrella Level II) western staff	300	1	300	60.2	1750		29.3	849.15147
PL1b (Estrella Level II) western visitor	35	1	35	50.8	1750		20.0	99.067672
PL1c (Estrella Level II) eastern	50	1	50	52.4	1750		21.5	141.52525
	385							1
			385					
					Combined Noise Level:	**30.4 dBA Leq**		**1090.7444**

APPENDIX E

Traffic Modeling

APPENDIX D

TRANSPORTATION ANALYSIS

TRAFFIC COUNT DATA

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Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	10	0	23	0	33	0	81	64	0	145	0	0	0	0	0	52	73	0	0	125	303
07:15 AM	4	0	21	0	25	0	54	90	0	144	0	0	0	0	0	74	77	0	0	151	320
07:30 AM	15	0	18	0	33	0	92	121	0	213	0	0	0	0	0	99	75	0	0	174	420
07:45 AM	14	0	28	0	42	0	103	118	0	221	0	0	0	0	0	75	103	0	0	178	441
Total	43	0	90	0	133	0	330	393	0	723	0	0	0	0	0	300	328	0	0	628	1484
08:00 AM	11	0	28	0	39	0	163	121	0	284	0	0	0	0	0	78	103	0	0	181	504
08:15 AM	10	0	17	0	27	0	128	107	0	235	0	0	0	0	0	75	84	0	0	159	421
08:30 AM	12	0	11	0	23	0	99	72	0	171	0	0	0	0	0	30	83	0	0	113	307
08:45 AM	12	1	11	0	24	0	93	92	0	185	0	0	0	0	0	61	91	0	0	152	361
Total	45	1	67	0	113	0	483	392	0	875	0	0	0	0	0	244	361	0	0	605	1593
Grand Total	88	1	157	0	246	0	813	785	0	1598	0	0	0	0	0	544	689	0	0	1233	3077
Apprch %	35.8	0.4	63.8	0		0	50.9	49.1	0		0	0	0	0		44.1	55.9	0	0		
Total %	2.9	0	5.1	0	8	0	26.4	25.5	0	51.9	0	0	0	0	0	17.7	22.4	0	0	40.1	

	US-101 SB RAMPS Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**15**	0	18	0	33	0	92	**121**	0	213	0	0	0	0	0	**99**	75	0	0	174	420
07:45 AM	14	0	**28**	0	**42**	0	103	118	0	221	0	0	0	0	0	75	**103**	0	0	178	441
08:00 AM	11	0	28	0	39	0	**163**	121	0	**284**	0	0	0	0	0	78	103	0	0	**181**	**504**
08:15 AM	10	0	17	0	27	0	128	107	0	235	0	0	0	0	0	75	84	0	0	159	421
Total Volume	50	0	91	0	141	0	486	467	0	953	0	0	0	0	0	327	365	0	0	692	1786
% App. Total	35.5	0	64.5	0		0	51	49	0		0	0	0	0		47.3	52.7	0	0		
PHF	.833	.000	.813	.000	.839	.000	.745	.965	.000	.839	.000	.000	.000	.000	.000	.826	.886	.000	.000	.956	.886

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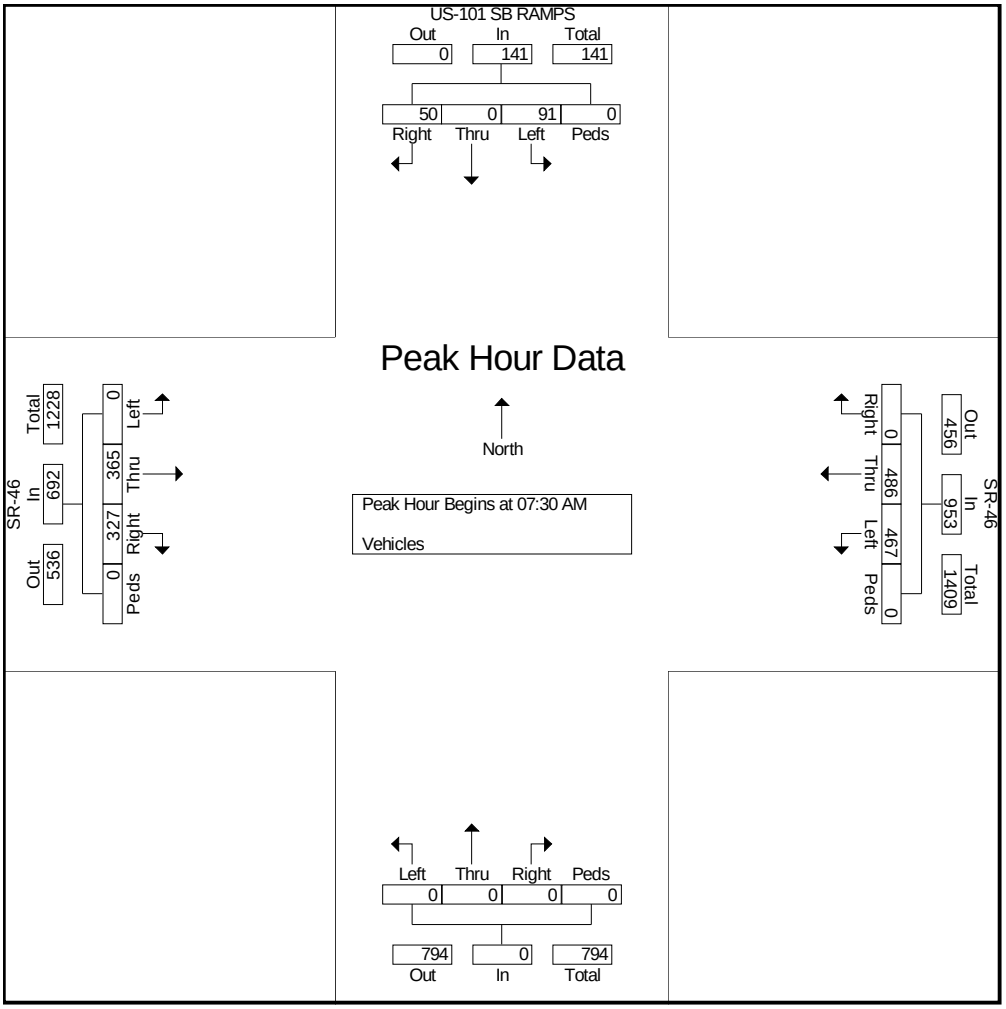

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Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	23	0	46	0	69	0	133	125	0	258	0	0	0	0	0	58	116	0	0	174	501
04:15 PM	28	0	32	0	60	0	138	125	0	263	0	0	0	0	0	76	120	0	0	196	519
04:30 PM	25	0	39	0	64	0	169	122	0	291	0	0	0	0	0	69	122	0	0	191	546
04:45 PM	31	0	35	0	66	0	170	114	0	284	0	0	0	0	0	64	122	0	0	186	536
Total	107	0	152	0	259	0	610	486	0	1096	0	0	0	0	0	267	480	0	0	747	2102
05:00 PM	19	0	56	0	75	0	160	140	0	300	0	0	0	0	0	72	132	0	0	204	579
05:15 PM	25	0	34	0	59	0	166	143	0	309	0	0	0	0	0	61	115	0	0	176	544
05:30 PM	28	1	50	0	79	0	153	114	0	267	0	0	0	0	0	68	152	0	0	220	566
05:45 PM	14	0	33	0	47	0	137	107	0	244	0	0	0	0	0	61	96	0	0	157	448
Total	86	1	173	0	260	0	616	504	0	1120	0	0	0	0	0	262	495	0	0	757	2137
Grand Total	193	1	325	0	519	0	1226	990	0	2216	0	0	0	0	0	529	975	0	0	1504	4239
Apprch %	37.2	0.2	62.6	0		0	55.3	44.7	0		0	0	0	0		35.2	64.8	0	0		
Total %	4.6	0	7.7	0	12.2	0	28.9	23.4	0	52.3	0	0	0	0	0	12.5	23	0	0	35.5	

	US-101 SB RAMPS Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**31**	0	35	0	66	0	**170**	114	0	284	0	0	0	0	0	64	122	0	0	186	536
05:00 PM	19	0	**56**	0	75	0	160	140	0	300	0	0	0	0	0	**72**	132	0	0	204	**579**
05:15 PM	25	0	34	0	59	0	166	**143**	0	**309**	0	0	0	0	0	61	115	0	0	176	544
05:30 PM	28	**1**	50	0	**79**	0	153	114	0	267	0	0	0	0	0	68	**152**	0	0	**220**	566
Total Volume	103	1	175	0	279	0	649	511	0	1160	0	0	0	0	0	265	521	0	0	786	2225
% App. Total	36.9	0.4	62.7	0		0	55.9	44.1	0		0	0	0	0		33.7	66.3	0	0		
PHF	.831	.250	.781	.000	.883	.000	.954	.893	.000	.939	.000	.000	.000	.000	.000	.920	.857	.000	.000	.893	.961

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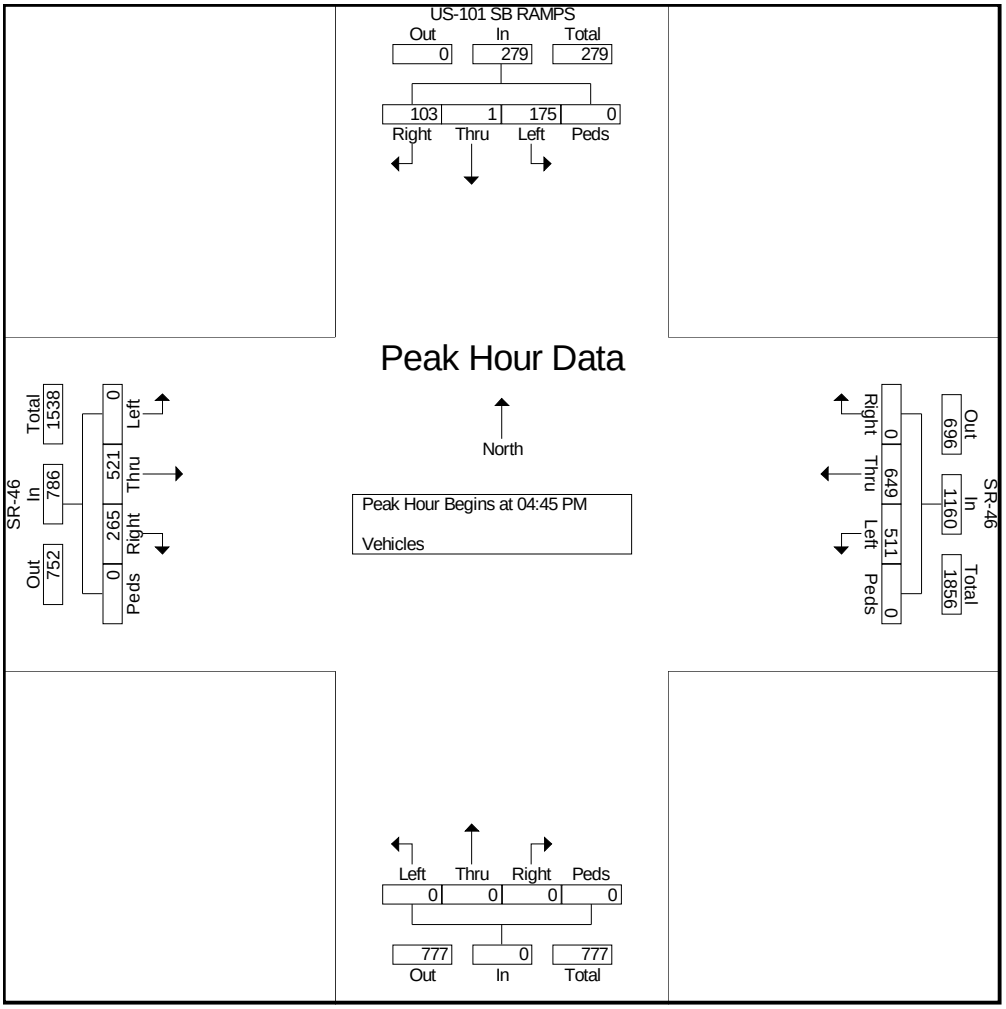

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Groups Printed- Vehicles

	SULPHUR SPRINGS RD Southbound					SR-46 Westbound					US-101 NB RAMPS Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	3	0	4	17	121	0	0	138	62	0	26	0	88	0	83	10	0	93	323
07:15 AM	0	0	1	0	1	22	135	0	0	157	51	0	22	0	73	0	82	12	0	94	325
07:30 AM	0	0	1	0	1	18	185	0	0	203	74	0	33	0	107	0	102	15	0	117	428
07:45 AM	1	0	0	0	1	35	211	0	0	246	118	0	43	0	161	0	121	12	0	133	541
Total	2	0	5	0	7	92	652	0	0	744	305	0	124	0	429	0	388	49	0	437	1617
08:00 AM	1	0	1	0	2	31	196	0	0	227	138	0	52	0	190	0	103	21	0	124	543
08:15 AM	1	0	2	0	3	37	146	0	0	183	84	1	42	0	127	0	98	13	0	111	424
08:30 AM	1	0	1	0	2	16	135	0	0	151	63	0	46	0	109	0	91	15	0	106	368
08:45 AM	1	0	1	0	2	19	182	0	0	201	89	1	34	0	124	0	97	13	0	110	437
Total	4	0	5	0	9	103	659	0	0	762	374	2	174	0	550	0	389	62	0	451	1772
Grand Total	6	0	10	0	16	195	1311	0	0	1506	679	2	298	0	979	0	777	111	0	888	3389
Apprch %	37.5	0	62.5	0		12.9	87.1	0	0		69.4	0.2	30.4	0		0	87.5	12.5	0		
Total %	0.2	0	0.3	0	0.5	5.8	38.7	0	0	44.4	20	0.1	8.8	0	28.9	0	22.9	3.3	0	26.2	

	SULPHUR SPRINGS RD Southbound					SR-46 Westbound					US-101 NB RAMPS Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	1	0	1	18	185	0	0	203	74	0	33	0	107	0	102	15	0	117	428
07:45 AM	**1**	0	0	0	1	35	**211**	0	0	**246**	118	0	43	0	161	0	**121**	12	0	**133**	541
08:00 AM	1	0	1	0	2	31	196	0	0	227	**138**	0	**52**	0	**190**	0	103	**21**	0	124	**543**
08:15 AM	1	0	**2**	0	**3**	**37**	146	0	0	183	84	**1**	42	0	127	0	98	13	0	111	424
Total Volume	3	0	4	0	7	121	738	0	0	859	414	1	170	0	585	0	424	61	0	485	1936
% App. Total	42.9	0	57.1	0		14.1	85.9	0	0		70.8	0.2	29.1	0		0	87.4	12.6	0		
PHF	.750	.000	.500	.000	.583	.818	.874	.000	.000	.873	.750	.250	.817	.000	.770	.000	.876	.726	.000	.912	.891

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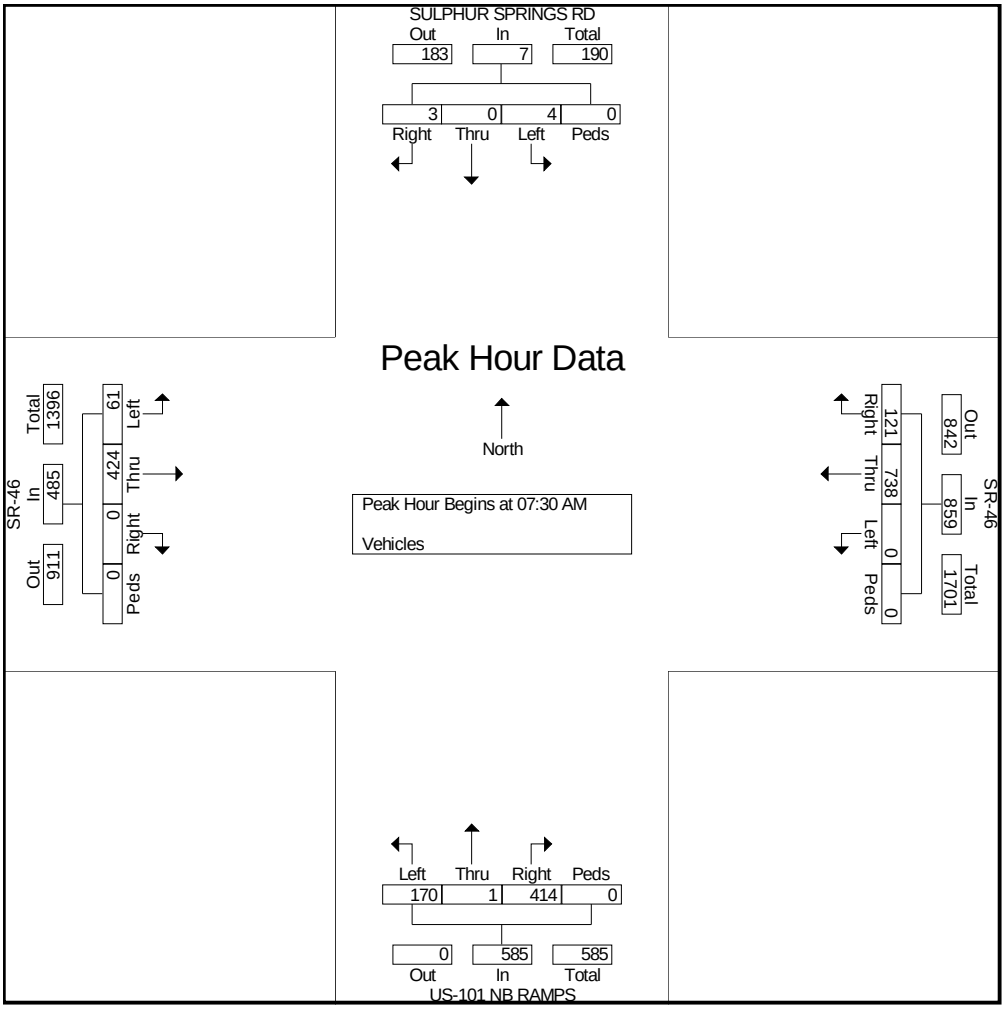

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Groups Printed- Vehicles

	SULPHUR SPRINGS RD Southbound					SR-46 Westbound					US-101 NB RAMPS Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	0	0	0	2	27	192	0	0	219	113	0	71	0	184	0	91	52	0	143	548
04:15 PM	1	0	0	0	1	28	188	0	0	216	125	0	64	0	189	0	125	63	0	188	594
04:30 PM	0	0	0	0	0	27	206	0	0	233	101	0	75	0	176	0	126	42	0	168	577
04:45 PM	0	0	0	0	0	22	216	0	0	238	99	0	84	0	183	0	152	36	0	188	609
Total	3	0	0	0	3	104	802	0	0	906	438	0	294	0	732	0	494	193	0	687	2328
05:00 PM	2	0	0	0	2	22	209	0	0	231	126	0	97	0	223	0	121	63	0	184	640
05:15 PM	0	0	0	0	0	31	191	0	0	222	118	1	108	0	227	0	118	42	0	160	609
05:30 PM	0	0	0	0	0	28	136	0	0	164	88	0	105	0	193	0	135	52	0	187	544
05:45 PM	0	0	0	0	0	25	151	0	0	176	112	0	90	0	202	0	101	36	0	137	515
Total	2	0	0	0	2	106	687	0	0	793	444	1	400	0	845	0	475	193	0	668	2308
Grand Total	5	0	0	0	5	210	1489	0	0	1699	882	1	694	0	1577	0	969	386	0	1355	4636
Apprch %	100	0	0	0		12.4	87.6	0	0		55.9	0.1	44	0		0	71.5	28.5	0		
Total %	0.1	0	0	0	0.1	4.5	32.1	0	0	36.6	19	0	15	0	34	0	20.9	8.3	0	29.2	

	SULPHUR SPRINGS RD Southbound					SR-46 Westbound					US-101 NB RAMPS Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	27	206	0	0	233	101	0	75	0	176	0	126	42	0	168	577
04:45 PM	0	0	0	0	0	22	**216**	0	0	**238**	99	0	84	0	183	0	**152**	36	0	**188**	609
05:00 PM	**2**	0	0	0	**2**	22	209	0	0	231	**126**	0	97	0	223	0	121	**63**	0	184	**640**
05:15 PM	0	0	0	0	0	**31**	191	0	0	222	118	**1**	**108**	0	**227**	0	118	42	0	160	609
Total Volume	2	0	0	0	2	102	822	0	0	924	444	1	364	0	809	0	517	183	0	700	2435
% App. Total	100	0	0	0		11	89	0	0		54.9	0.1	45	0		0	73.9	26.1	0		
PHF	.250	.000	.000	.000	.250	.823	.951	.000	.000	.971	.881	.250	.843	.000	.891	.000	.850	.726	.000	.931	.951

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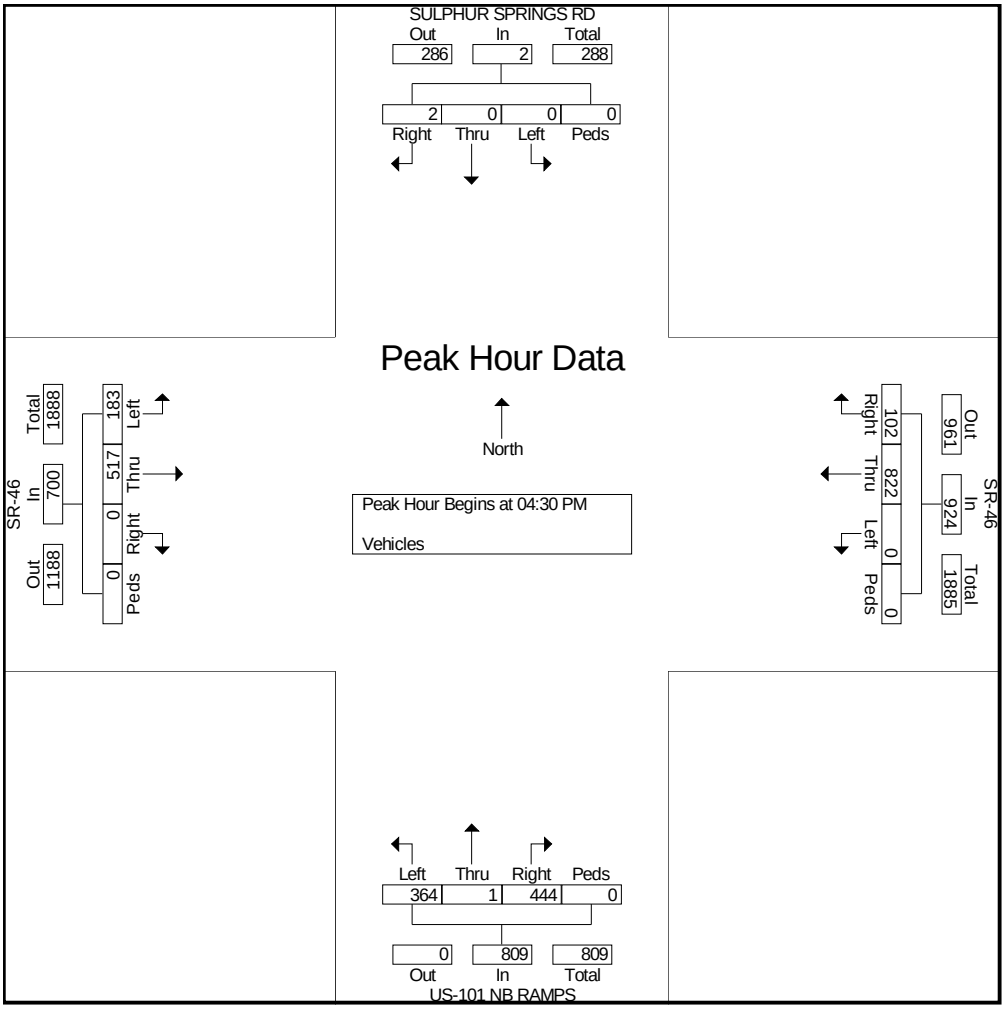

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File Name : 2AM FINAL
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Groups Printed- Vehicles

	BUENA VISTA DR Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	21	0	8	0	29	12	115	0	0	127	0	0	0	0	0	0	111	25	0	136	292
07:15 AM	26	0	14	0	40	15	152	0	0	167	0	0	0	0	0	0	110	15	0	125	332
07:30 AM	37	0	21	0	58	20	174	0	0	194	0	0	0	0	0	0	141	31	0	172	424
07:45 AM	57	0	42	0	99	58	173	0	0	231	0	0	0	0	0	0	196	83	0	279	609
Total	141	0	85	0	226	105	614	0	0	719	0	0	0	0	0	0	558	154	0	712	1657
08:00 AM	64	0	48	0	112	83	167	0	0	250	0	0	0	0	0	0	137	87	0	224	586
08:15 AM	66	0	55	0	121	31	121	0	0	152	0	0	0	0	0	0	151	42	0	193	466
08:30 AM	37	0	16	0	53	12	139	0	0	151	0	0	0	0	0	0	117	44	0	161	365
08:45 AM	31	0	12	0	43	30	153	0	0	183	0	0	0	0	0	0	139	77	0	216	442
Total	198	0	131	0	329	156	580	0	0	736	0	0	0	0	0	0	544	250	0	794	1859
Grand Total	339	0	216	0	555	261	1194	0	0	1455	0	0	0	0	0	0	1102	404	0	1506	3516
Apprch %	61.1	0	38.9	0		17.9	82.1	0	0		0	0	0	0		0	73.2	26.8	0		
Total %	9.6	0	6.1	0	15.8	7.4	34	0	0	41.4	0	0	0	0	0	0	31.3	11.5	0	42.8	

	BUENA VISTA DR Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	37	0	21	0	58	20	**174**	0	0	194	0	0	0	0	0	0	141	31	0	172	424
07:45 AM	57	0	42	0	99	58	173	0	0	231	0	0	0	0	0	0	**196**	83	0	**279**	**609**
08:00 AM	64	0	48	0	112	**83**	167	0	0	**250**	0	0	0	0	0	0	137	**87**	0	224	586
08:15 AM	**66**	0	**55**	0	**121**	31	121	0	0	152	0	0	0	0	0	0	151	42	0	193	466
Total Volume	224	0	166	0	390	192	635	0	0	827	0	0	0	0	0	0	625	243	0	868	2085
% App. Total	57.4	0	42.6	0		23.2	76.8	0	0		0	0	0	0		0	72	28	0		
PHF	.848	.000	.755	.000	.806	.578	.912	.000	.000	.827	.000	.000	.000	.000	.000	.000	.797	.698	.000	.778	.856

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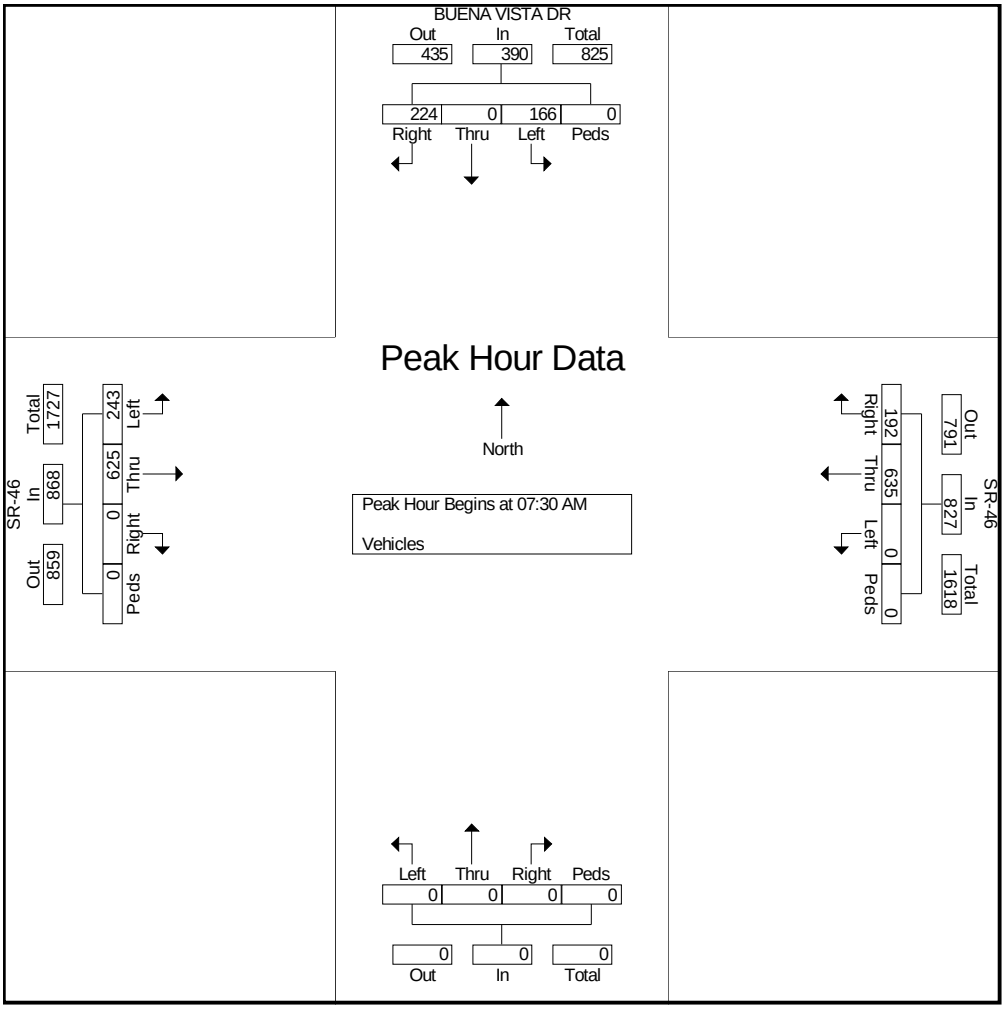

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Groups Printed- Vehicles

	BUENA VISTA DR Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	35	0	29	0	64	22	180	0	0	202	0	0	0	0	0	0	136	66	0	202	468
04:15 PM	44	0	10	0	54	31	182	0	0	213	0	0	0	0	0	0	185	56	0	241	508
04:30 PM	42	0	17	0	59	17	193	0	0	210	0	0	0	0	0	0	183	57	0	240	509
04:45 PM	40	0	14	0	54	16	236	0	0	252	0	0	0	0	0	0	169	69	0	238	544
Total	161	0	70	0	231	86	791	0	0	877	0	0	0	0	0	0	673	248	0	921	2029
05:00 PM	37	0	20	0	57	20	213	0	0	233	0	0	0	0	0	0	155	62	0	217	507
05:15 PM	36	0	26	0	62	22	207	0	0	229	0	0	0	0	0	0	179	58	0	237	528
05:30 PM	27	0	14	0	41	25	138	0	0	163	0	0	0	0	0	0	193	50	0	243	447
05:45 PM	40	0	16	0	56	11	122	0	0	133	0	0	0	0	0	0	179	49	0	228	417
Total	140	0	76	0	216	78	680	0	0	758	0	0	0	0	0	0	706	219	0	925	1899
Grand Total	301	0	146	0	447	164	1471	0	0	1635	0	0	0	0	0	0	1379	467	0	1846	3928
Apprch %	67.3	0	32.7	0		10	90	0	0		0	0	0	0		0	74.7	25.3	0		
Total %	7.7	0	3.7	0	11.4	4.2	37.4	0	0	41.6	0	0	0	0	0	0	35.1	11.9	0	47	

	BUENA VISTA DR Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**42**	0	17	0	59	17	193	0	0	210	0	0	0	0	0	0	**183**	57	0	**240**	509
04:45 PM	40	0	14	0	54	16	**236**	0	0	**252**	0	0	0	0	0	0	169	**69**	0	238	**544**
05:00 PM	37	0	20	0	57	20	213	0	0	233	0	0	0	0	0	0	155	62	0	217	507
05:15 PM	36	0	**26**	0	**62**	**22**	207	0	0	229	0	0	0	0	0	0	179	58	0	237	528
Total Volume	155	0	77	0	232	75	849	0	0	924	0	0	0	0	0	0	686	246	0	932	2088
% App. Total	66.8	0	33.2	0		8.1	91.9	0	0		0	0	0	0		0	73.6	26.4	0		
PHF	.923	.000	.740	.000	.935	.852	.899	.000	.000	.917	.000	.000	.000	.000	.000	.000	.937	.891	.000	.971	.960

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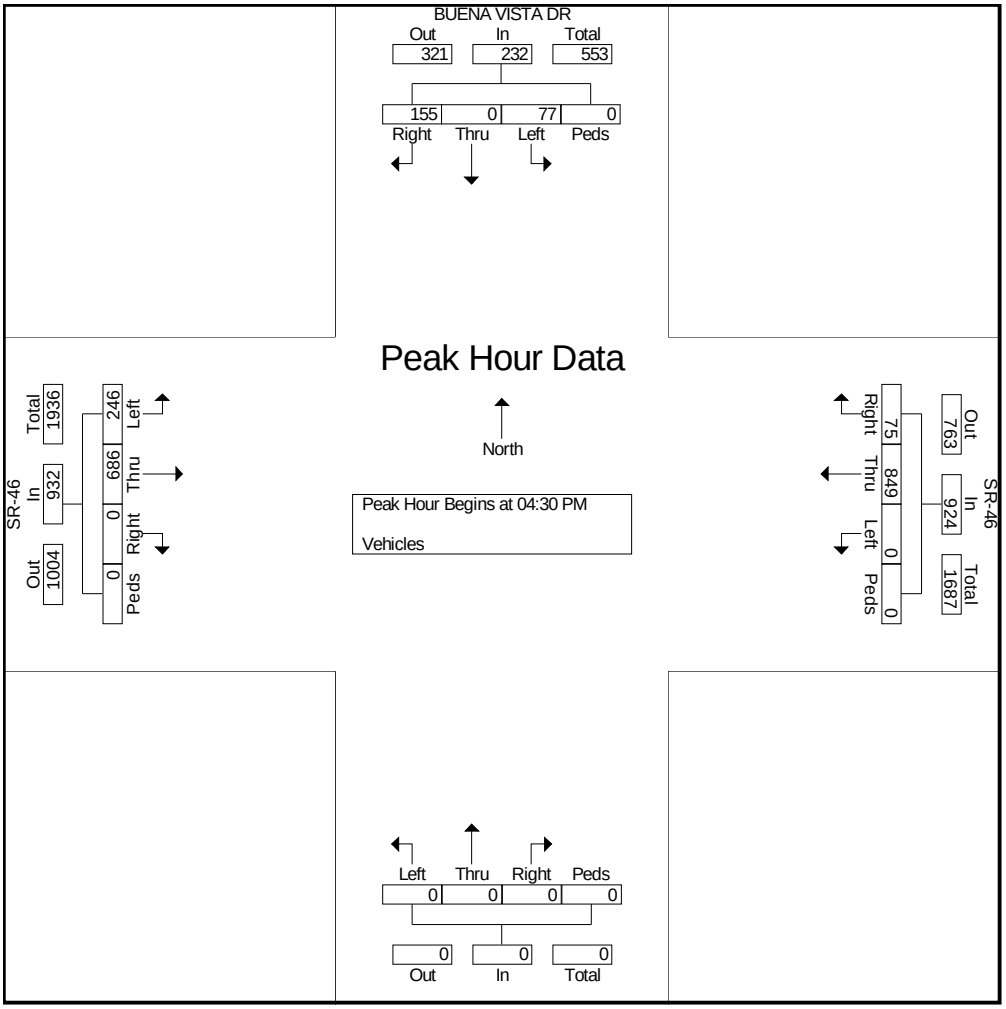

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Groups Printed- Vehicles

	GOLDEN HILL RD Southbound					SR-46 Westbound					GOLDEN HILL RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	4	7	0	22	13	88	6	0	107	3	11	14	0	28	32	59	14	0	105	262
07:15 AM	16	6	15	0	37	12	128	3	0	143	1	23	36	0	60	38	89	19	0	146	386
07:30 AM	22	19	15	0	56	22	159	19	0	200	3	20	47	0	70	40	99	28	0	167	493
07:45 AM	13	16	14	0	43	23	147	17	0	187	4	29	86	0	119	55	124	39	0	218	567
Total	62	45	51	0	158	70	522	45	0	637	11	83	183	0	277	165	371	100	0	636	1708
08:00 AM	12	9	15	0	36	18	165	6	0	189	7	44	81	0	132	61	106	27	0	194	551
08:15 AM	20	12	23	0	55	9	102	5	0	116	3	13	44	0	60	63	111	29	0	203	434
08:30 AM	24	17	19	0	60	13	84	3	0	100	3	26	26	0	55	33	84	26	0	143	358
08:45 AM	18	9	11	0	38	17	91	9	0	117	0	39	61	0	100	38	81	20	0	139	394
Total	74	47	68	0	189	57	442	23	0	522	13	122	212	0	347	195	382	102	0	679	1737
Grand Total	136	92	119	0	347	127	964	68	0	1159	24	205	395	0	624	360	753	202	0	1315	3445
Apprch %	39.2	26.5	34.3	0		11	83.2	5.9	0		3.8	32.9	63.3	0		27.4	57.3	15.4	0		
Total %	3.9	2.7	3.5	0	10.1	3.7	28	2	0	33.6	0.7	6	11.5	0	18.1	10.4	21.9	5.9	0	38.2	

	GOLDEN HILL RD Southbound					SR-46 Westbound					GOLDEN HILL RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**22**	**19**	15	0	**56**	22	159	**19**	0	**200**	3	20	47	0	70	40	99	28	0	167	493
07:45 AM	13	16	14	0	43	**23**	147	17	0	187	4	29	**86**	0	119	55	**124**	**39**	0	**218**	**567**
08:00 AM	12	9	15	0	36	18	**165**	6	0	189	**7**	**44**	81	0	**132**	61	106	27	0	194	551
08:15 AM	20	12	**23**	0	55	9	102	5	0	116	3	13	44	0	60	**63**	111	29	0	203	434
Total Volume	67	56	67	0	190	72	573	47	0	692	17	106	258	0	381	219	440	123	0	782	2045
% App. Total	35.3	29.5	35.3	0		10.4	82.8	6.8	0		4.5	27.8	67.7	0		28	56.3	15.7	0		
PHF	.761	.737	.728	.000	.848	.783	.868	.618	.000	.865	.607	.602	.750	.000	.722	.869	.887	.788	.000	.897	.902

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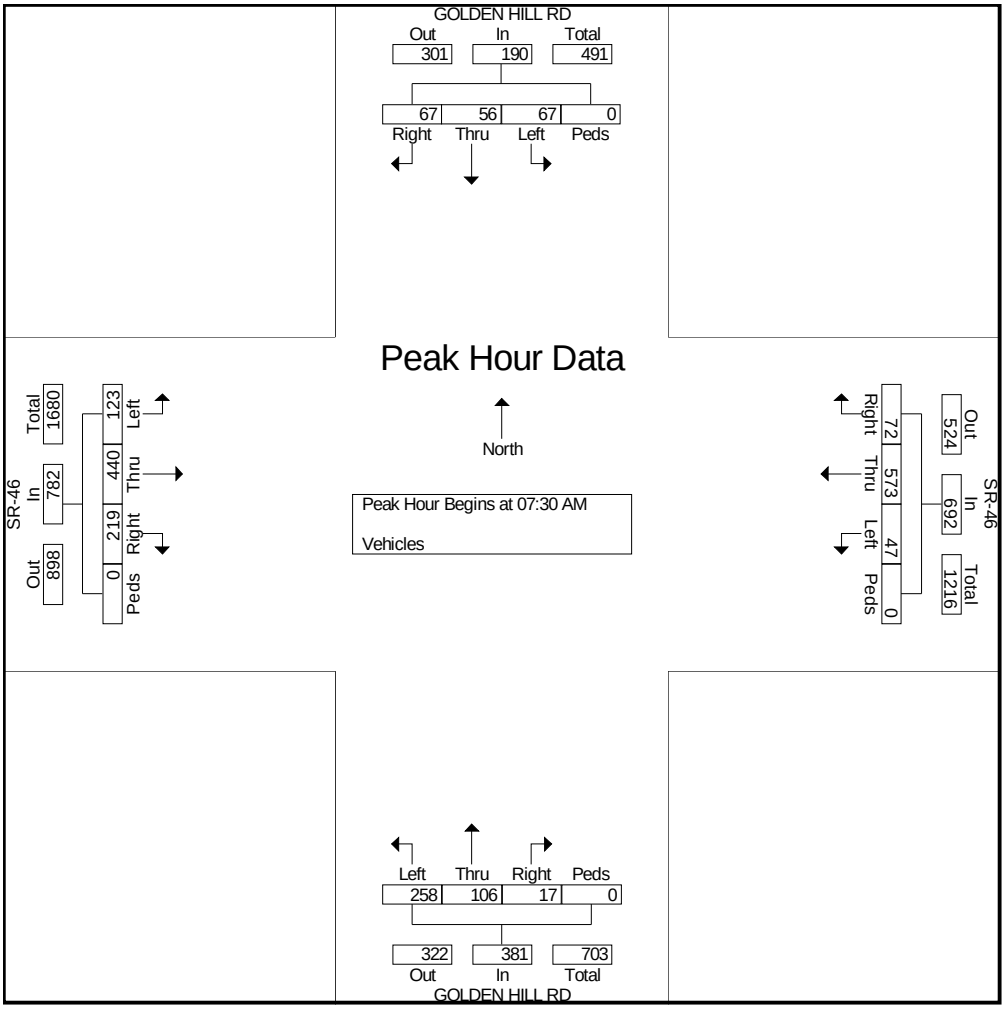

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Groups Printed- Vehicles

	GOLDEN HILL RD Southbound					SR-46 Westbound					GOLDEN HILL RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	25	26	18	0	69	14	148	7	0	169	5	9	40	0	54	52	90	7	0	149	441
04:15 PM	23	21	14	0	58	13	119	7	0	139	9	25	53	0	87	41	109	11	0	161	445
04:30 PM	21	31	12	0	64	6	156	14	0	176	4	19	48	0	71	56	112	21	0	189	500
04:45 PM	17	23	14	0	54	16	205	18	0	239	5	14	47	0	66	38	120	8	0	166	525
Total	86	101	58	0	245	49	628	46	0	723	23	67	188	0	278	187	431	47	0	665	1911
05:00 PM	29	24	23	0	76	11	202	13	0	226	6	16	48	0	70	57	129	8	0	194	566
05:15 PM	20	20	31	0	71	18	136	4	0	158	7	13	50	0	70	51	133	19	0	203	502
05:30 PM	23	16	14	0	53	15	115	8	0	138	3	22	61	0	86	41	160	16	0	217	494
05:45 PM	14	17	18	0	49	9	114	6	0	129	2	19	36	0	57	55	136	11	0	202	437
Total	86	77	86	0	249	53	567	31	0	651	18	70	195	0	283	204	558	54	0	816	1999
Grand Total	172	178	144	0	494	102	1195	77	0	1374	41	137	383	0	561	391	989	101	0	1481	3910
Apprch %	34.8	36	29.1	0		7.4	87	5.6	0		7.3	24.4	68.3	0		26.4	66.8	6.8	0		
Total %	4.4	4.6	3.7	0	12.6	2.6	30.6	2	0	35.1	1	3.5	9.8	0	14.3	10	25.3	2.6	0	37.9	

	GOLDEN HILL RD Southbound					SR-46 Westbound					GOLDEN HILL RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	21	**31**	12	0	64	6	156	14	0	176	4	**19**	48	0	**71**	56	112	**21**	0	189	500
04:45 PM	17	23	14	0	54	16	**205**	**18**	0	**239**	5	14	47	0	66	38	120	8	0	166	525
05:00 PM	**29**	24	23	0	**76**	11	202	13	0	226	6	16	48	0	70	**57**	129	8	0	194	**566**
05:15 PM	20	20	**31**	0	71	**18**	136	4	0	158	**7**	13	**50**	0	70	51	**133**	19	0	**203**	502
Total Volume	87	98	80	0	265	51	699	49	0	799	22	62	193	0	277	202	494	56	0	752	2093
% App. Total	32.8	37	30.2	0		6.4	87.5	6.1	0		7.9	22.4	69.7	0		26.9	65.7	7.4	0		
PHF	.750	.790	.645	.000	.872	.708	.852	.681	.000	.836	.786	.816	.965	.000	.975	.886	.929	.667	.000	.926	.924

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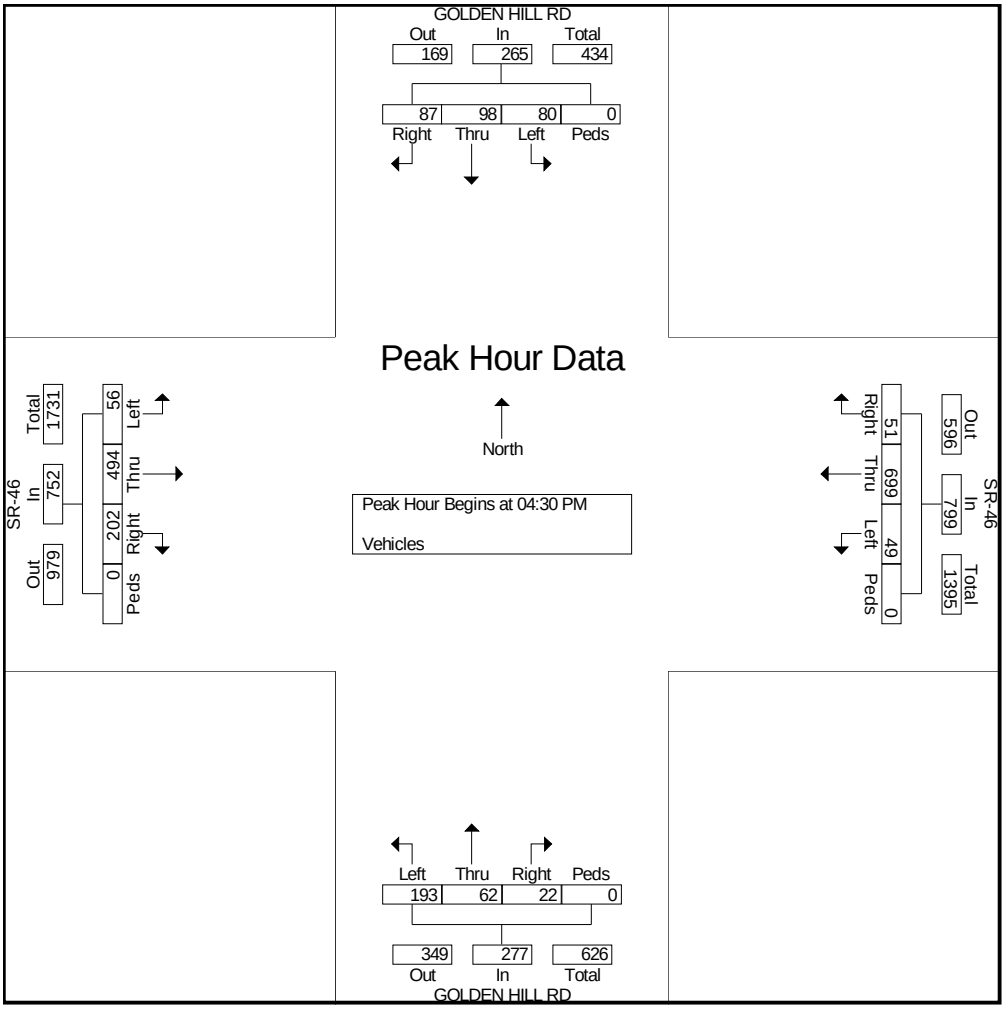

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File Name : 3AM FINAL
Site Code : 00000003
Start Date : 1/29/2009
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Groups Printed- Vehicles

	UNION RD Southbound					SR-46 Westbound					UNION RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	78	40	0	118	51	0	2	0	53	5	69	0	0	74	245
07:15 AM	1	0	0	0	1	0	126	47	0	173	28	0	3	0	31	5	99	0	0	104	309
07:30 AM	0	0	0	0	0	0	140	112	0	252	36	0	14	0	50	3	106	0	0	109	411
07:45 AM	0	0	0	0	0	0	180	56	0	236	123	0	7	0	130	11	166	1	0	178	544
Total	1	0	0	0	1	0	524	255	0	779	238	0	26	0	264	24	440	1	0	465	1509
08:00 AM	0	0	0	0	0	0	216	47	0	263	59	0	6	0	65	6	126	0	0	132	460
08:15 AM	0	0	0	0	0	1	128	37	0	166	46	0	3	0	49	7	142	0	0	149	364
08:30 AM	1	0	0	0	1	0	93	38	0	131	25	0	3	0	28	5	91	1	0	97	257
08:45 AM	0	0	0	0	0	0	108	21	0	129	25	0	2	0	27	6	98	0	0	104	260
Total	1	0	0	0	1	1	545	143	0	689	155	0	14	0	169	24	457	1	0	482	1341
Grand Total	2	0	0	0	2	1	1069	398	0	1468	393	0	40	0	433	48	897	2	0	947	2850
Apprch %	100	0	0	0		0.1	72.8	27.1	0		90.8	0	9.2	0		5.1	94.7	0.2	0		
Total %	0.1	0	0	0	0.1	0	37.5	14	0	51.5	13.8	0	1.4	0	15.2	1.7	31.5	0.1	0	33.2	

	UNION RD Southbound					SR-46 Westbound					UNION RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	0	140	**112**	0	252	36	0	**14**	0	50	3	106	0	0	109	411
07:45 AM	0	0	0	0	0	0	180	56	0	236	**123**	0	7	0	**130**	**11**	**166**	**1**	0	**178**	**544**
08:00 AM	0	0	0	0	0	0	**216**	47	0	**263**	59	0	6	0	65	6	126	0	0	132	460
08:15 AM	0	0	0	0	0	**1**	128	37	0	166	46	0	3	0	49	7	142	0	0	149	364
Total Volume	0	0	0	0	0	1	664	252	0	917	264	0	30	0	294	27	540	1	0	568	1779
% App. Total	0	0	0	0		0.1	72.4	27.5	0		89.8	0	10.2	0		4.8	95.1	0.2	0		
PHF	.000	.000	.000	.000	.000	.250	.769	.563	.000	.872	.537	.000	.536	.000	.565	.614	.813	.250	.000	.798	.818

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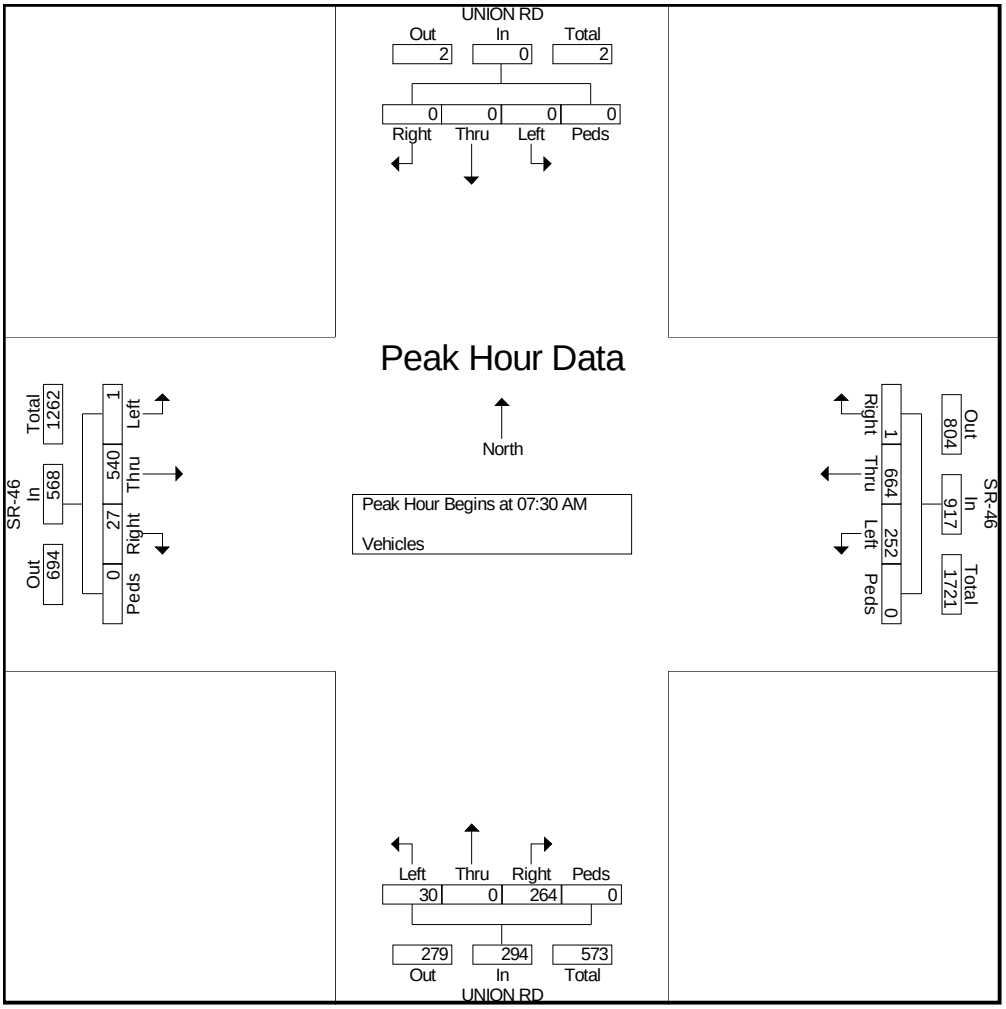

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File Name : 3PM FINAL
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Groups Printed- Vehicles

	UNION RD Southbound					SR-46 Westbound					UNION RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	0	0	1	0	162	61	0	223	54	2	10	0	66	7	139	0	0	146	436
04:15 PM	0	0	0	0	0	0	170	45	0	215	54	0	7	0	61	11	126	0	0	137	413
04:30 PM	0	0	0	0	0	0	198	69	0	267	54	0	6	0	60	7	141	0	0	148	475
04:45 PM	0	0	0	0	0	0	215	49	0	264	74	0	9	0	83	8	142	0	0	150	497
Total	1	0	0	0	1	0	745	224	0	969	236	2	32	0	270	33	548	0	0	581	1821
05:00 PM	0	0	0	0	0	0	224	66	0	290	48	0	5	0	53	16	124	0	0	140	483
05:15 PM	0	0	0	0	0	0	150	45	0	195	42	0	3	0	45	9	179	1	0	189	429
05:30 PM	0	0	0	0	0	0	142	47	0	189	59	1	3	0	63	11	147	0	0	158	410
05:45 PM	0	0	0	0	0	0	144	50	0	194	55	0	5	0	60	6	156	0	0	162	416
Total	0	0	0	0	0	0	660	208	0	868	204	1	16	0	221	42	606	1	0	649	1738
Grand Total	1	0	0	0	1	0	1405	432	0	1837	440	3	48	0	491	75	1154	1	0	1230	3559
Apprch %	100	0	0	0		0	76.5	23.5	0		89.6	0.6	9.8	0		6.1	93.8	0.1	0		
Total %	0	0	0	0	0	0	39.5	12.1	0	51.6	12.4	0.1	1.3	0	13.8	2.1	32.4	0	0	34.6	

	UNION RD Southbound					SR-46 Westbound					UNION RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	198	**69**	0	267	54	0	6	0	60	7	141	0	0	148	475
04:45 PM	0	0	0	0	0	0	215	49	0	264	**74**	0	**9**	0	**83**	8	142	0	0	150	**497**
05:00 PM	0	0	0	0	0	0	**224**	66	0	**290**	48	0	5	0	53	**16**	124	0	0	140	483
05:15 PM	0	0	0	0	0	0	150	45	0	195	42	0	3	0	45	9	**179**	**1**	0	**189**	429
Total Volume	0	0	0	0	0	0	787	229	0	1016	218	0	23	0	241	40	586	1	0	627	1884
% App. Total	0	0	0	0		0	77.5	22.5	0		90.5	0	9.5	0		6.4	93.5	0.2	0		
PHF	.000	.000	.000	.000	.000	.000	.878	.830	.000	.876	.736	.000	.639	.000	.726	.625	.818	.250	.000	.829	.948

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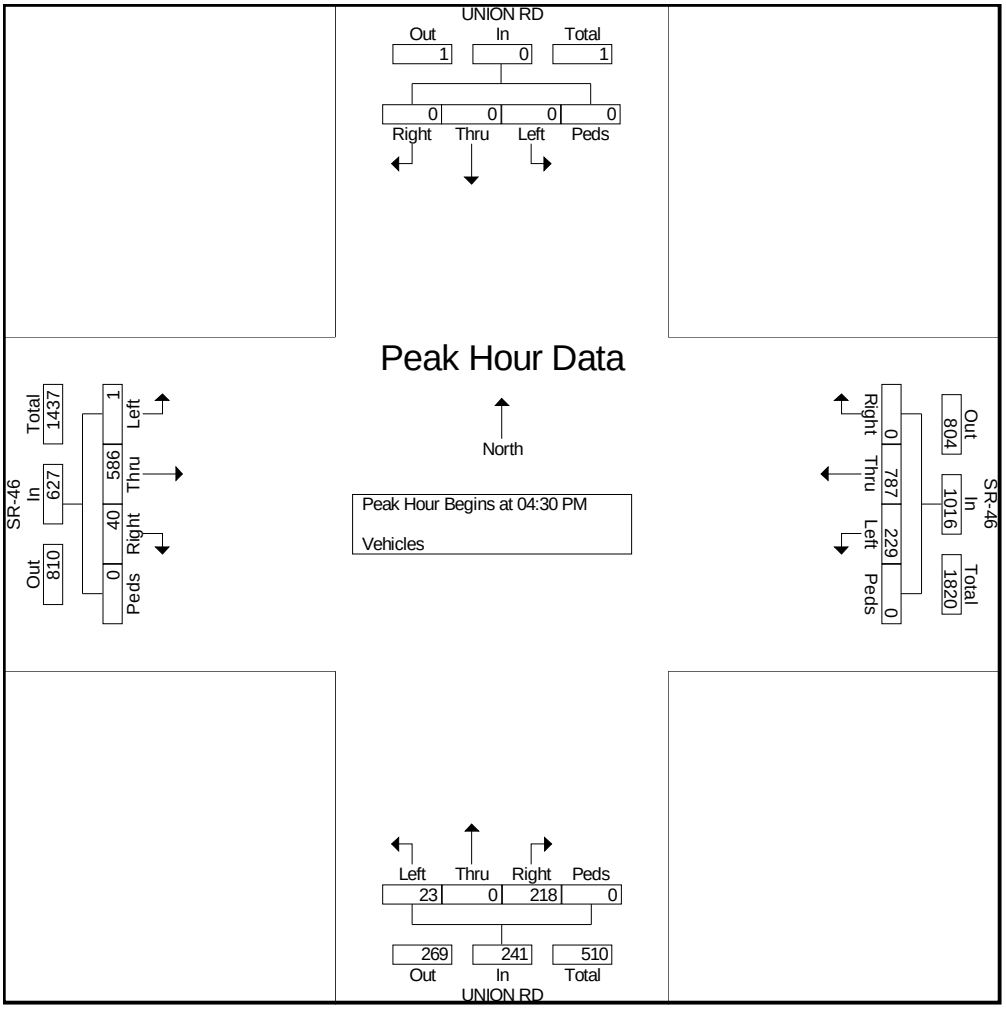

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File Name : 10AM FINAL
Site Code : 00000010
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Groups Printed- Vehicles

	AIRPORT RD Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	27	0	4	0	31	1	107	0	0	108	0	0	0	0	0	0	68	63	0	131	270
07:15 AM	26	0	1	0	27	2	164	1	0	167	0	0	0	0	0	0	85	56	0	141	335
07:30 AM	53	0	3	0	56	5	172	0	0	177	0	0	0	0	0	0	98	53	0	151	384
07:45 AM	46	0	1	0	47	4	196	0	0	200	0	0	0	0	0	0	129	133	0	262	509
Total	152	0	9	0	161	12	639	1	0	652	0	0	0	0	0	0	380	305	0	685	1498
08:00 AM	40	0	1	0	41	7	211	0	0	218	0	0	0	0	0	2	95	87	0	184	443
08:15 AM	34	0	0	0	34	6	131	0	0	137	0	0	0	0	0	0	127	29	0	156	327
08:30 AM	25	0	0	0	25	28	80	0	0	108	0	0	0	0	0	0	53	35	0	88	221
08:45 AM	41	0	2	0	43	2	103	0	0	105	0	0	0	0	0	0	89	33	0	122	270
Total	140	0	3	0	143	43	525	0	0	568	0	0	0	0	0	2	364	184	0	550	1261
Grand Total	292	0	12	0	304	55	1164	1	0	1220	0	0	0	0	0	2	744	489	0	1235	2759
Apprch %	96.1	0	3.9	0		4.5	95.4	0.1	0		0	0	0	0		0.2	60.2	39.6	0		
Total %	10.6	0	0.4	0	11	2	42.2	0	0	44.2	0	0	0	0	0	0.1	27	17.7	0	44.8	

	AIRPORT RD Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	26	0	1	0	27	2	164	**1**	0	167	0	0	0	0	0	0	85	56	0	141	335
07:30 AM	**53**	0	**3**	0	**56**	5	172	0	0	177	0	0	0	0	0	0	98	53	0	151	384
07:45 AM	46	0	1	0	47	4	196	0	0	200	0	0	0	0	0	0	**129**	**133**	0	**262**	**509**
08:00 AM	40	0	1	0	41	**7**	**211**	0	0	**218**	0	0	0	0	0	**2**	95	87	0	184	443
Total Volume	165	0	6	0	171	18	743	1	0	762	0	0	0	0	0	2	407	329	0	738	1671
% App. Total	96.5	0	3.5	0		2.4	97.5	0.1	0		0	0	0	0		0.3	55.1	44.6	0		
PHF	.778	.000	.500	.000	.763	.643	.880	.250	.000	.874	.000	.000	.000	.000	.000	.250	.789	.618	.000	.704	.821

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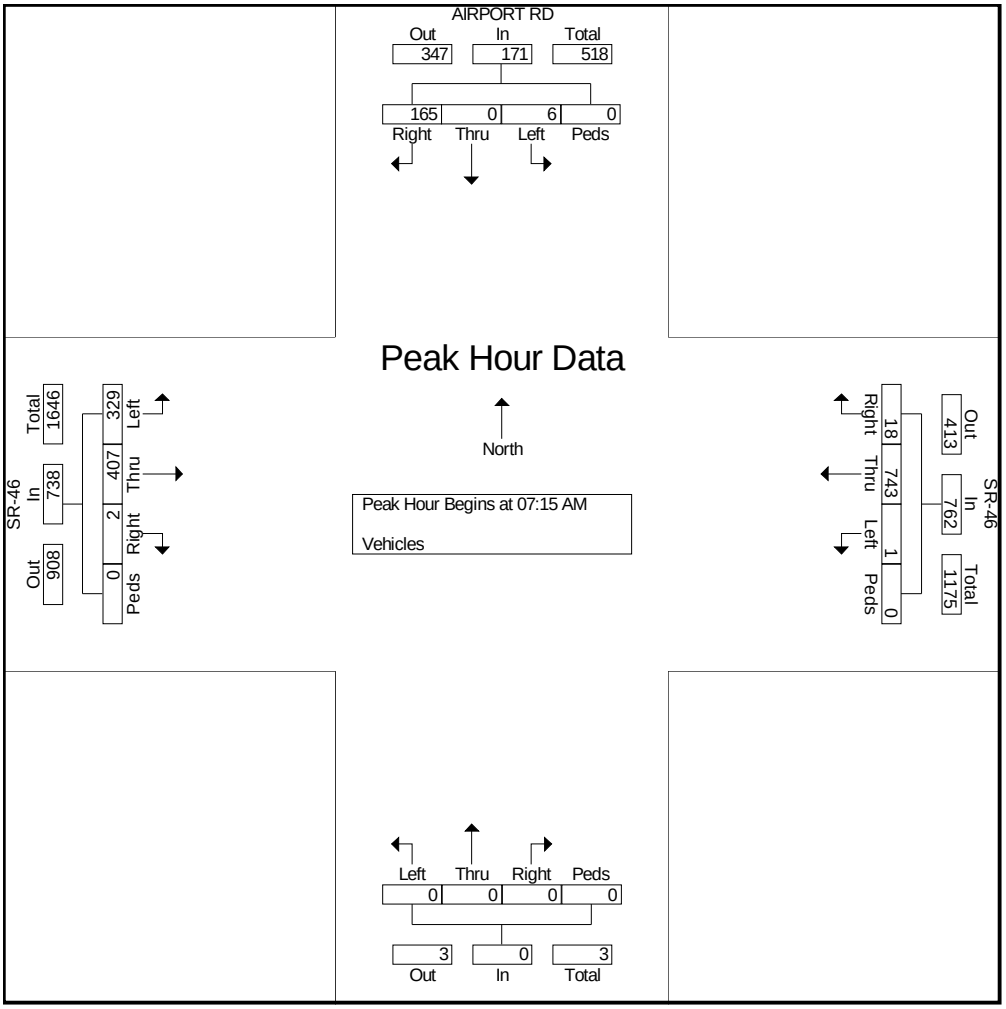

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Groups Printed- Vehicles

	AIRPORT RD Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	67	0	0	0	67	4	153	0	0	157	0	0	0	0	0	0	172	48	0	220	444
04:15 PM	75	0	1	2	78	4	137	0	0	141	0	0	0	0	0	0	153	51	0	204	423
04:30 PM	84	0	0	0	84	3	185	0	0	188	0	0	0	0	0	0	154	43	0	197	469
04:45 PM	70	0	1	0	71	2	188	0	0	190	0	0	0	0	0	0	137	40	0	177	438
Total	296	0	2	2	300	13	663	0	0	676	0	0	0	0	0	0	616	182	0	798	1774
05:00 PM	112	0	3	0	115	2	159	0	0	161	0	0	0	0	0	0	154	36	0	190	466
05:15 PM	82	0	1	0	83	12	140	0	0	152	0	0	0	0	0	0	155	47	0	202	437
05:30 PM	70	0	1	0	71	1	131	0	0	132	0	0	0	0	0	0	153	45	0	198	401
05:45 PM	38	0	1	0	39	1	119	0	0	120	0	0	0	0	0	0	147	38	0	185	344
Total	302	0	6	0	308	16	549	0	0	565	0	0	0	0	0	0	609	166	0	775	1648
Grand Total	598	0	8	2	608	29	1212	0	0	1241	0	0	0	0	0	0	1225	348	0	1573	3422
Apprch %	98.4	0	1.3	0.3		2.3	97.7	0	0		0	0	0	0		0	77.9	22.1	0		
Total %	17.5	0	0.2	0.1	17.8	0.8	35.4	0	0	36.3	0	0	0	0	0	0	35.8	10.2	0	46	

	AIRPORT RD Southbound					SR-46 Westbound					Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	84	0	0	0	84	3	185	0	0	188	0	0	0	0	0	0	154	43	0	197	**469**
04:45 PM	70	0	1	0	71	2	**188**	0	0	**190**	0	0	0	0	0	0	137	40	0	177	438
05:00 PM	**112**	0	**3**	0	**115**	2	159	0	0	161	0	0	0	0	0	0	154	36	0	190	466
05:15 PM	82	0	1	0	83	**12**	140	0	0	152	0	0	0	0	0	0	**155**	**47**	0	**202**	437
Total Volume	348	0	5	0	353	19	672	0	0	691	0	0	0	0	0	0	600	166	0	766	1810
% App. Total	98.6	0	1.4	0		2.7	97.3	0	0		0	0	0	0		0	78.3	21.7	0		
PHF	.777	.000	.417	.000	.767	.396	.894	.000	.000	.909	.000	.000	.000	.000	.000	.000	.968	.883	.000	.948	.965

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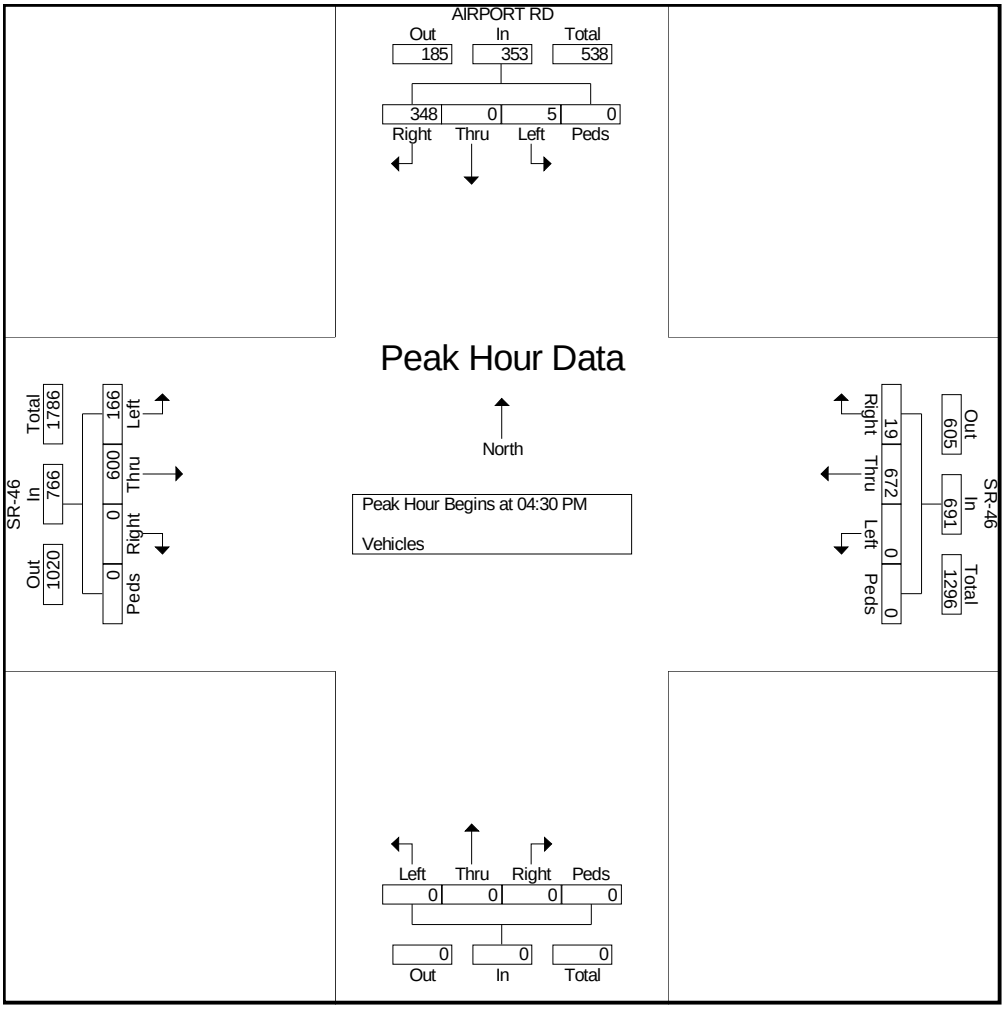

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File Name : 5AM FINAL
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Groups Printed- Vehicles

	JARDINE RD Southbound					SR-46 Westbound					JARDINE RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	45	0	1	0	46	0	81	2	0	83	3	0	0	0	3	2	57	23	0	82	214
07:15 AM	63	0	1	0	64	5	118	0	0	123	1	0	0	0	1	0	36	19	0	55	243
07:30 AM	104	0	3	0	107	1	100	1	0	102	0	0	0	0	0	1	76	15	0	92	301
07:45 AM	94	1	5	0	100	14	95	0	0	109	0	0	0	0	0	1	113	25	0	139	348
Total	306	1	10	0	317	20	394	3	0	417	4	0	0	0	4	4	282	82	0	368	1106
08:00 AM	50	1	5	0	56	8	91	0	0	99	0	0	0	0	0	0	66	42	0	108	263
08:15 AM	37	1	8	0	46	4	67	0	0	71	0	0	2	0	2	0	68	35	0	103	222
08:30 AM	41	0	3	0	44	1	85	0	0	86	0	0	0	0	0	1	74	16	0	91	221
08:45 AM	35	0	1	0	36	1	85	0	0	86	1	0	0	0	1	0	65	21	0	86	209
Total	163	2	17	0	182	14	328	0	0	342	1	0	2	0	3	1	273	114	0	388	915
Grand Total	469	3	27	0	499	34	722	3	0	759	5	0	2	0	7	5	555	196	0	756	2021
Apprch %	94	0.6	5.4	0		4.5	95.1	0.4	0		71.4	0	28.6	0		0.7	73.4	25.9	0		
Total %	23.2	0.1	1.3	0	24.7	1.7	35.7	0.1	0	37.6	0.2	0	0.1	0	0.3	0.2	27.5	9.7	0	37.4	

	JARDINE RD Southbound					SR-46 Westbound					JARDINE RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	63	0	1	0	64	5	**118**	0	0	**123**	**1**	0	0	0	**1**	0	36	19	0	55	243
07:30 AM	**104**	0	3	0	**107**	1	100	**1**	0	102	0	0	0	0	0	**1**	76	15	0	92	301
07:45 AM	94	**1**	**5**	0	100	**14**	95	0	0	109	0	0	0	0	0	1	**113**	25	0	**139**	**348**
08:00 AM	50	1	5	0	56	8	91	0	0	99	0	0	0	0	0	0	66	**42**	0	108	263
Total Volume	311	2	14	0	327	28	404	1	0	433	1	0	0	0	1	2	291	101	0	394	1155
% App. Total	95.1	0.6	4.3	0		6.5	93.3	0.2	0		100	0	0	0		0.5	73.9	25.6	0		
PHF	.748	.500	.700	.000	.764	.500	.856	.250	.000	.880	.250	.000	.000	.000	.250	.500	.644	.601	.000	.709	.830

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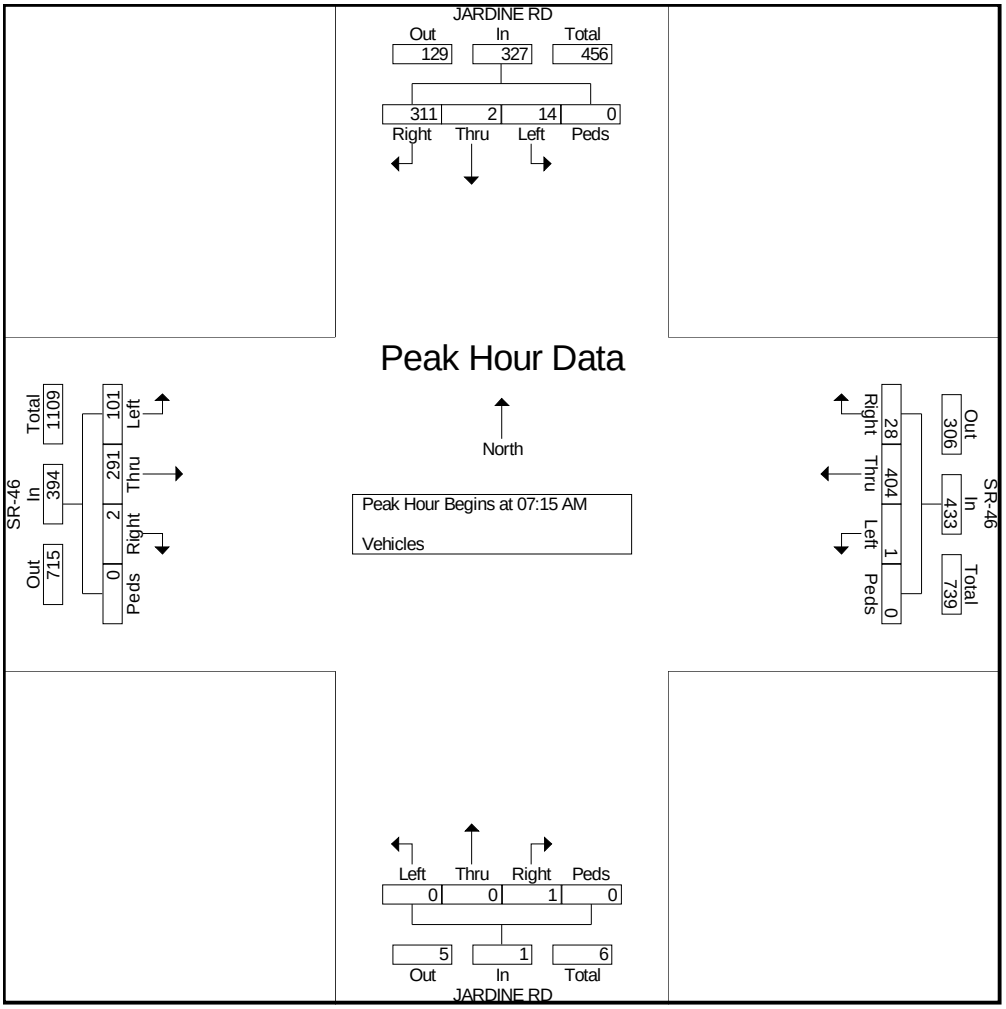

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Groups Printed- Vehicles

	JARDINE RD Southbound					SR-46 Westbound					JARDINE RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	34	0	5	0	39	3	76	0	0	79	0	0	1	0	1	0	127	38	0	165	284
04:15 PM	33	0	6	0	39	2	87	1	0	90	0	1	1	0	2	3	105	38	0	146	277
04:30 PM	42	0	13	0	55	5	112	0	0	117	0	0	1	0	1	0	115	49	0	164	337
04:45 PM	37	0	5	0	42	1	117	0	0	118	1	0	0	0	1	0	98	43	0	141	302
Total	146	0	29	0	175	11	392	1	0	404	1	1	3	0	5	3	445	168	0	616	1200
05:00 PM	31	0	7	0	38	5	81	0	0	86	0	0	0	0	0	2	91	47	0	140	264
05:15 PM	28	0	1	0	29	6	90	0	0	96	1	0	0	0	1	0	97	49	0	146	272
05:30 PM	23	0	1	0	24	3	96	0	0	99	0	0	7	0	7	0	109	63	0	172	302
05:45 PM	40	0	1	0	41	6	69	0	0	75	0	0	0	0	0	0	112	48	0	160	276
Total	122	0	10	0	132	20	336	0	0	356	1	0	7	0	8	2	409	207	0	618	1114
Grand Total	268	0	39	0	307	31	728	1	0	760	2	1	10	0	13	5	854	375	0	1234	2314
Apprch %	87.3	0	12.7	0		4.1	95.8	0.1	0		15.4	7.7	76.9	0		0.4	69.2	30.4	0		
Total %	11.6	0	1.7	0	13.3	1.3	31.5	0	0	32.8	0.1	0	0.4	0	0.6	0.2	36.9	16.2	0	53.3	

	JARDINE RD Southbound					SR-46 Westbound					JARDINE RD Northbound					SR-46 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	34	0	5	0	39	3	76	0	0	79	0	0	**1**	0	1	0	**127**	38	0	**165**	284
04:15 PM	33	0	6	0	39	2	87	**1**	0	90	0	**1**	1	0	**2**	**3**	105	38	0	146	277
04:30 PM	**42**	0	**13**	0	**55**	**5**	112	0	0	117	0	0	1	0	1	0	115	**49**	0	164	**337**
04:45 PM	37	0	5	0	42	1	**117**	0	0	**118**	**1**	0	0	0	1	0	98	43	0	141	302
Total Volume	146	0	29	0	175	11	392	1	0	404	1	1	3	0	5	3	445	168	0	616	1200
% App. Total	83.4	0	16.6	0		2.7	97	0.2	0		20	20	60	0		0.5	72.2	27.3	0		
PHF	.869	.000	.558	.000	.795	.550	.838	.250	.000	.856	.250	.250	.750	.000	.625	.250	.876	.857	.000	.933	.890

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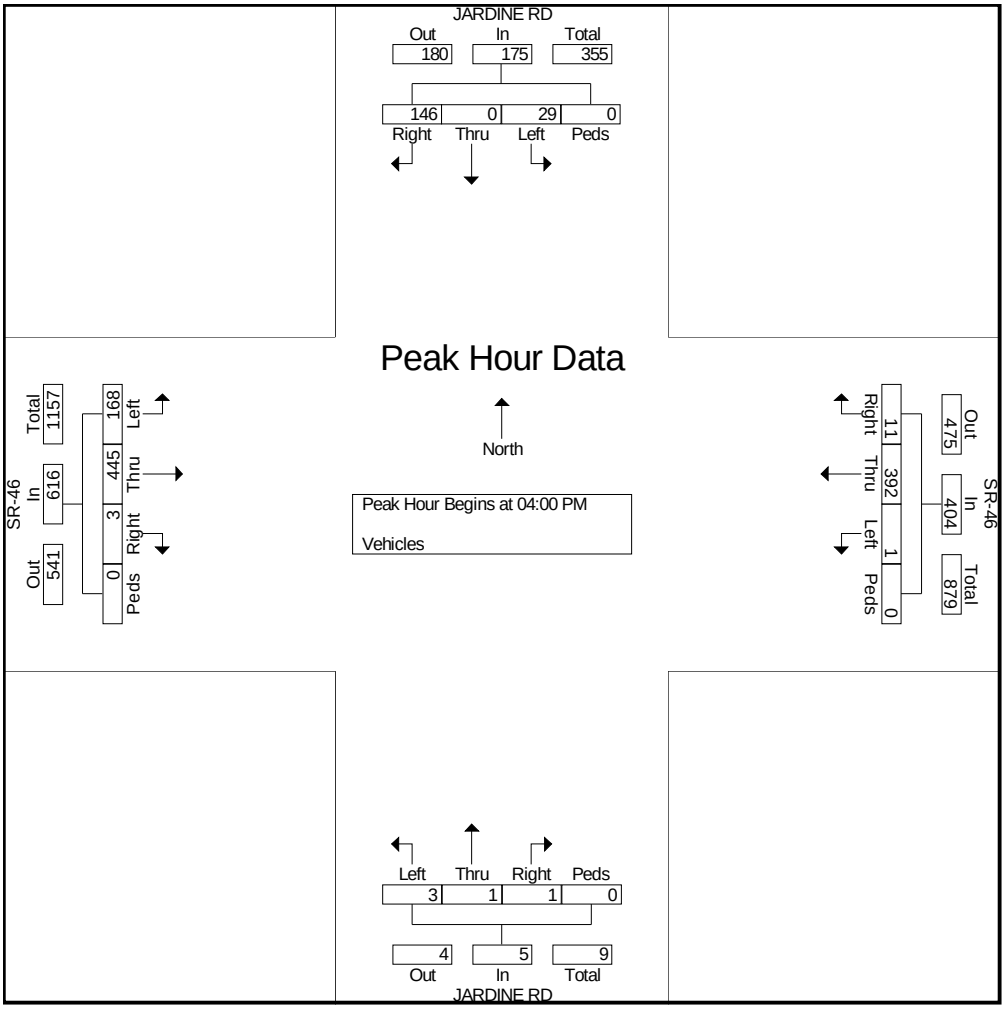

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File Name : 11AM FINAL
Site Code : 00000011
Start Date : 1/29/2009
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Groups Printed- Vehicles

	GOLDEN HILL RD Southbound					UNION RD Westbound					GOLDEN HILL RD Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	32	10	0	45	9	15	32	0	56	15	25	9	0	49	6	11	3	0	20	170
07:15 AM	1	34	12	0	47	8	22	27	0	57	16	20	10	0	46	4	10	2	0	16	166
07:30 AM	5	67	10	0	82	5	17	86	0	108	24	54	9	0	87	26	6	12	0	44	321
07:45 AM	14	89	19	0	122	4	22	57	0	83	61	93	16	0	170	35	15	17	0	67	442
Total	23	222	51	0	296	26	76	202	0	304	116	192	44	0	352	71	42	34	0	147	1099
08:00 AM	5	82	16	0	103	5	24	37	0	66	39	98	8	0	145	19	18	11	0	48	362
08:15 AM	4	63	3	0	70	4	11	15	0	30	22	68	5	0	95	4	11	9	0	24	219
08:30 AM	4	52	9	0	65	7	17	27	0	51	21	66	11	0	98	17	3	2	0	22	236
08:45 AM	17	48	10	0	75	13	16	14	0	43	35	74	11	0	120	11	20	19	0	50	288
Total	30	245	38	0	313	29	68	93	0	190	117	306	35	0	458	51	52	41	0	144	1105
Grand Total	53	467	89	0	609	55	144	295	0	494	233	498	79	0	810	122	94	75	0	291	2204
Apprch %	8.7	76.7	14.6	0		11.1	29.1	59.7	0		28.8	61.5	9.8	0		41.9	32.3	25.8	0		
Total %	2.4	21.2	4	0	27.6	2.5	6.5	13.4	0	22.4	10.6	22.6	3.6	0	36.8	5.5	4.3	3.4	0	13.2	

	GOLDEN HILL RD Southbound					UNION RD Westbound					GOLDEN HILL RD Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	5	67	10	0	82	**5**	17	**86**	0	**108**	24	54	9	0	87	26	6	12	0	44	321
07:45 AM	**14**	**89**	**19**	0	**122**	4	22	57	0	83	**61**	93	**16**	0	**170**	**35**	15	**17**	0	**67**	**442**
08:00 AM	5	82	16	0	103	5	**24**	37	0	66	39	**98**	8	0	145	19	**18**	11	0	48	362
08:15 AM	4	63	3	0	70	4	11	15	0	30	22	68	5	0	95	4	11	9	0	24	219
Total Volume	28	301	48	0	377	18	74	195	0	287	146	313	38	0	497	84	50	49	0	183	1344
% App. Total	7.4	79.8	12.7	0		6.3	25.8	67.9	0		29.4	63	7.6	0		45.9	27.3	26.8	0		
PHF	.500	.846	.632	.000	.773	.900	.771	.567	.000	.664	.598	.798	.594	.000	.731	.600	.694	.721	.000	.683	.760

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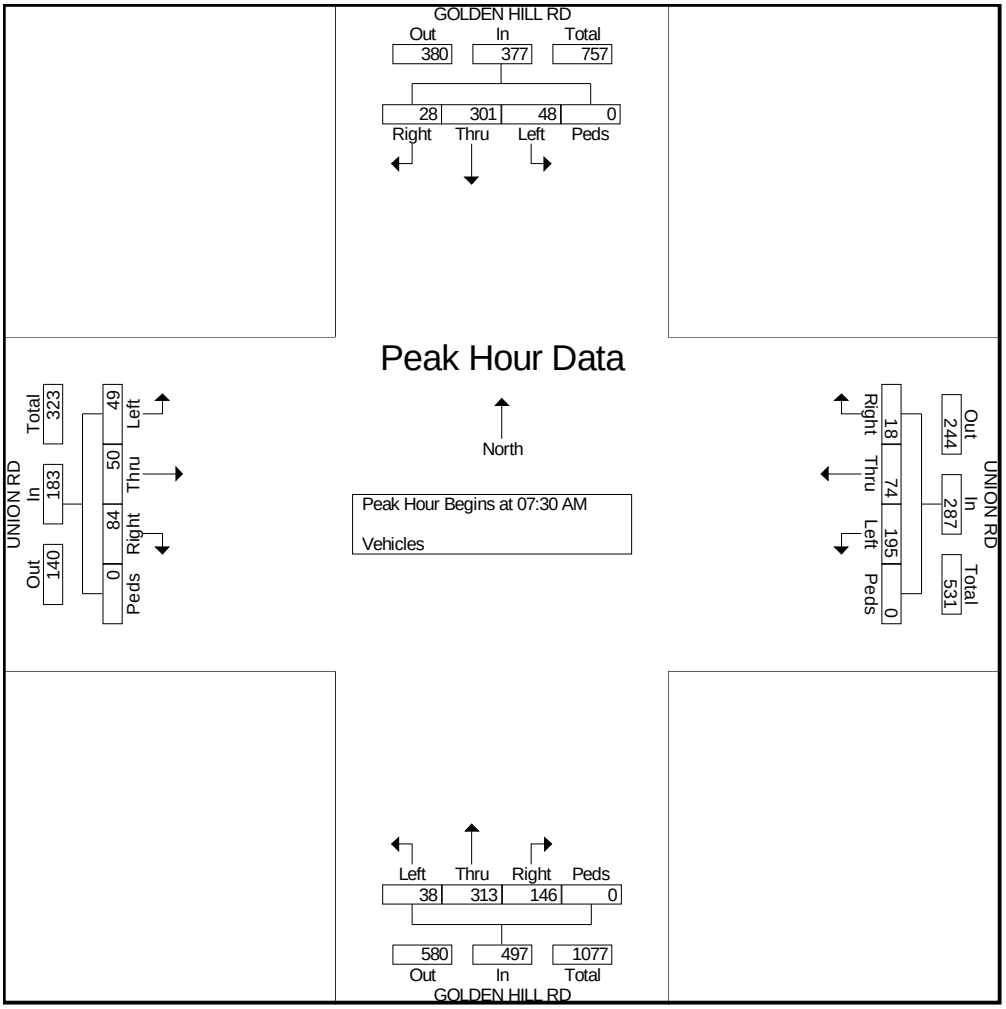

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	GOLDEN HILL RD Southbound					UNION RD Westbound					GOLDEN HILL RD Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	15	72	11	0	98	19	27	25	0	71	37	53	8	0	98	2	8	9	0	19	286
04:15 PM	13	62	6	0	81	11	38	29	0	78	39	47	9	0	95	10	22	14	0	46	300
04:30 PM	10	71	3	0	84	6	28	34	0	68	29	53	8	0	90	16	25	11	0	52	294
04:45 PM	12	68	2	0	82	3	30	37	0	70	27	43	7	0	77	22	24	8	0	54	283
Total	50	273	22	0	345	39	123	125	0	287	132	196	32	0	360	50	79	42	0	171	1163
05:00 PM	13	46	3	0	62	2	29	42	0	73	25	43	10	0	78	19	16	5	0	40	253
05:15 PM	10	51	8	0	69	6	18	41	0	65	32	41	15	0	88	16	12	12	0	40	262
05:30 PM	10	63	14	0	87	11	15	37	0	63	46	69	12	0	127	15	18	8	0	41	318
05:45 PM	12	54	8	0	74	8	12	36	0	56	35	56	9	0	100	10	18	12	0	40	270
Total	45	214	33	0	292	27	74	156	0	257	138	209	46	0	393	60	64	37	0	161	1103
Grand Total	95	487	55	0	637	66	197	281	0	544	270	405	78	0	753	110	143	79	0	332	2266
Apprch %	14.9	76.5	8.6	0		12.1	36.2	51.7	0		35.9	53.8	10.4	0		33.1	43.1	23.8	0		
Total %	4.2	21.5	2.4	0	28.1	2.9	8.7	12.4	0	24	11.9	17.9	3.4	0	33.2	4.9	6.3	3.5	0	14.7	

	GOLDEN HILL RD Southbound					UNION RD Westbound					GOLDEN HILL RD Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**15**	**72**	**11**	0	**98**	**19**	27	25	0	71	37	**53**	8	0	**98**	2	8	9	0	19	286
04:15 PM	13	62	6	0	81	11	**38**	29	0	**78**	**39**	47	**9**	0	95	10	22	**14**	0	46	**300**
04:30 PM	10	71	3	0	84	6	28	34	0	68	29	53	8	0	90	16	**25**	11	0	52	294
04:45 PM	12	68	2	0	82	3	30	**37**	0	70	27	43	7	0	77	**22**	24	8	0	**54**	283
Total Volume	50	273	22	0	345	39	123	125	0	287	132	196	32	0	360	50	79	42	0	171	1163
% App. Total	14.5	79.1	6.4	0		13.6	42.9	43.6	0		36.7	54.4	8.9	0		29.2	46.2	24.6	0		
PHF	.833	.948	.500	.000	.880	.513	.809	.845	.000	.920	.846	.925	.889	.000	.918	.568	.790	.750	.000	.792	.969

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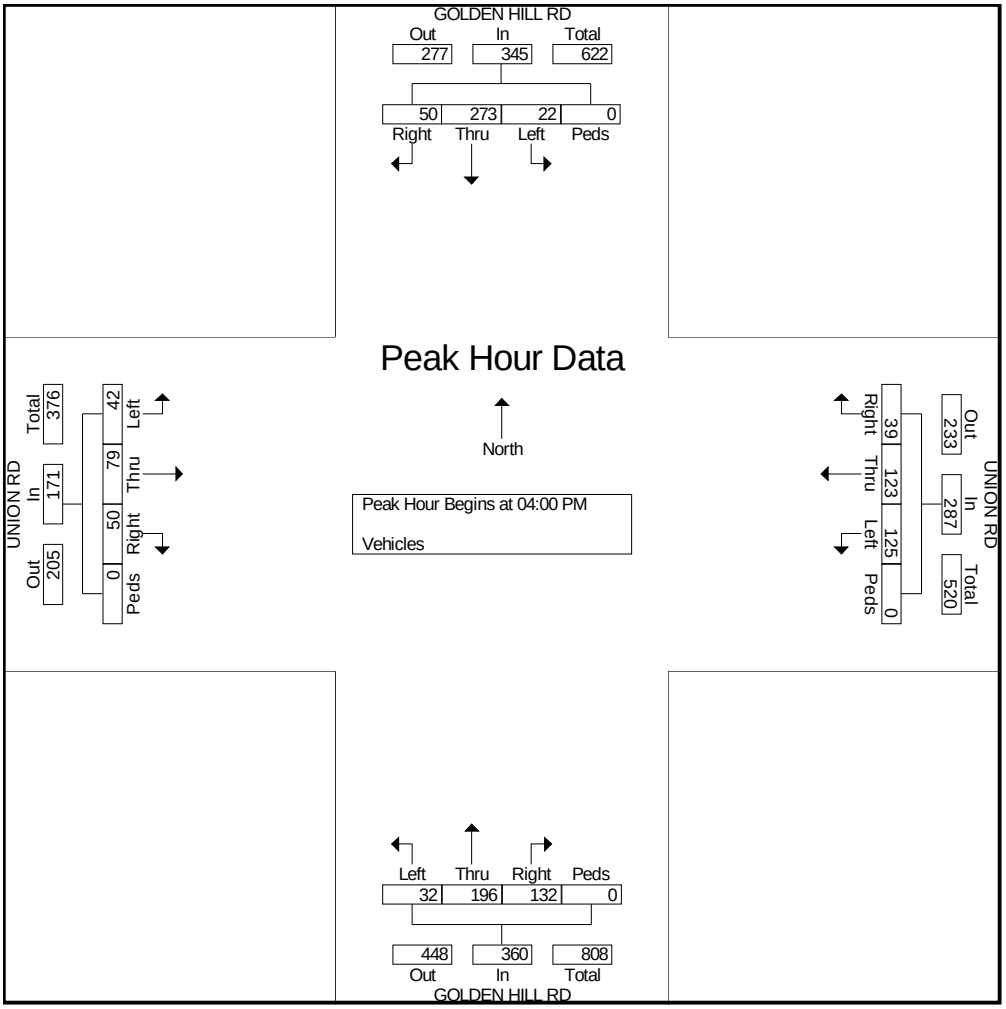

INTERSECTION LEVELS OF SERVICE CALCULATIONS

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1429	1597	3406						1367	1223
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1429	1597	3406						1367	1223
Volume (vph)	0	390	327	467	486	0	0	0	0	95	0	50
Peak-hour factor, PHF	0.96	0.96	0.96	0.84	0.84	0.84	1.00	1.00	1.00	0.84	0.84	0.84
Adj. Flow (vph)	0	406	341	556	579	0	0	0	0	113	0	60
RTOR Reduction (vph)	0	0	223	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	406	118	556	579	0	0	0	0	0	113	7
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	0%	5%	13%	13%	6%	0%	0%	0%	0%	32%	0%	32%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		32.3	32.3	38.0	74.4						11.2	11.2
Effective Green, g (s)		32.9	32.9	38.8	75.7						11.3	11.3
Actuated g/C Ratio		0.35	0.35	0.41	0.80						0.12	0.12
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1191	495	652	2714						163	145
v/s Ratio Prot		c0.12		c0.35	0.17							
v/s Ratio Perm			0.08								0.08	0.01
v/c Ratio		0.34	0.24	0.85	0.21						0.69	0.05
Uniform Delay, d1		23.0	22.1	25.5	2.4						40.2	37.1
Progression Factor		1.00	1.00	1.27	0.34						1.00	1.00
Incremental Delay, d2		0.8	1.1	8.9	0.1						12.0	0.1
Delay (s)		23.8	23.3	41.3	1.0						52.2	37.2
Level of Service		C	C	D	A						D	D
Approach Delay (s)		23.6			20.7			0.0			47.0	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.98		1.00	0.85			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1399	3374			3179		1570	1405			1738	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (perm)	1399	3374			3179		1570	1405			1738	
Volume (vph)	61	424	0	0	780	121	170	1	414	4	0	3
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.75	0.75	0.75
Adj. Flow (vph)	67	466	0	0	897	139	221	1	538	5	0	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	334	0	0	0	0
Lane Group Flow (vph)	67	466	0	0	1036	0	221	205	0	0	9	0
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	29%	7%	0%	0%	8%	29%	15%	0%	15%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	8.2	60.2			46.9		19.6	19.6			1.0	
Effective Green, g (s)	8.2	61.3			49.1		20.7	20.7			1.0	
Actuated g/C Ratio	0.09	0.65			0.52		0.22	0.22			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	121	2177			1643		342	306			18	
v/s Ratio Prot	c0.05	0.14			c0.33		0.14	c0.15			c0.01	
v/s Ratio Perm												
v/c Ratio	0.55	0.21			0.63		0.65	0.67			0.50	
Uniform Delay, d1	41.6	6.9			16.4		33.8	34.0			46.8	
Progression Factor	1.53	0.03			1.00		1.00	1.00			1.00	
Incremental Delay, d2	5.2	0.2			1.8		5.1	6.7			7.7	
Delay (s)	69.1	0.4			18.3		38.9	40.7			54.5	
Level of Service	E	A			B		D	D			D	
Approach Delay (s)		9.1			18.3			40.2			54.5	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3223	1504	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3223	1504	1719	1538
Volume (vph)	243	625	706	192	166	224
Peak-hour factor, PHF	0.78	0.78	0.83	0.83	0.81	0.81
Adj. Flow (vph)	312	801	851	231	205	277
RTOR Reduction (vph)	0	0	0	143	0	214
Lane Group Flow (vph)	312	801	851	88	205	63
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	12%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	20.8	82.5	28.1	28.1	17.9	17.9
Effective Green, g (s)	20.3	82.5	31.4	31.4	18.8	18.8
Actuated g/C Ratio	0.25	1.00	0.38	0.38	0.23	0.23
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	423	3223	1227	572	392	350
v/s Ratio Prot	c0.18	0.25	c0.26		c0.12	
v/s Ratio Perm				0.06		0.04
v/c Ratio	0.74	0.25	0.69	0.15	0.52	0.18
Uniform Delay, d1	28.6	0.0	21.5	16.8	27.9	25.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	0.0	1.8	0.1	1.4	0.3
Delay (s)	35.5	0.0	23.3	17.0	29.4	25.9
Level of Service	D	A	C	B	C	C
Approach Delay (s)		10.0	21.9		27.4	
Approach LOS		A	C		C	

Intersection Summary			
HCM Average Control Delay	17.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	82.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.98			0.99			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1719	3013		1719	3128			1738			1682	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (perm)	1719	3013		1719	3128			1738			1682	
Volume (vph)	123	449	219	47	573	72	258	106	17	67	56	67
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.75	0.75	0.75	0.85	0.85	0.85
Adj. Flow (vph)	137	499	243	54	659	83	344	141	23	79	66	79
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	137	742	0	54	742	0	0	508	0	0	224	0
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	15.6	49.5		7.9	41.8			51.0			24.7	
Effective Green, g (s)	15.1	52.8		7.4	45.1			51.9			25.6	
Actuated g/C Ratio	0.10	0.34		0.05	0.29			0.34			0.17	
Clearance Time (s)	3.5	7.3		3.5	7.3			4.9			4.9	
Vehicle Extension (s)	2.0	3.0		2.0	3.0			3.5			3.5	
Lane Grp Cap (vph)	169	1035		83	918			587			280	
v/s Ratio Prot	c0.08	0.25		0.03	c0.24			c0.29			c0.13	
v/s Ratio Perm												
v/c Ratio	0.81	0.72		0.65	0.81			0.87			0.80	
Uniform Delay, d1	67.9	43.9		71.9	50.3			47.6			61.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	23.5	2.4		13.1	5.3			12.9			15.4	
Delay (s)	91.4	46.3		84.9	55.6			60.6			77.0	
Level of Service	F	D		F	E			E			E	
Approach Delay (s)		53.4			57.6			60.6			77.0	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM Average Control Delay	58.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	153.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	540	27	252	664	1	30	0	264	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	675	34	290	763	1	40	0	352	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	764			709			1655	2038	354	2035	2054	382
vC1, stage 1 conf vol							694	694		1343	1343	
vC2, stage 2 conf vol							961	1344		692	711	
vCu, unblocked vol	764			709			1655	2038	354	2035	2054	382
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			67			75	100	44	100	100	100
cM capacity (veh/h)	858			866			162	138	633	11	109	622

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	1	450	259	290	509	256	40	352	0	0
Volume Left	1	0	0	290	0	0	40	0	0	0
Volume Right	0	0	34	0	0	1	0	352	0	0
cSH	858	1700	1700	866	1700	1700	162	633	1700	1700
Volume to Capacity	0.00	0.26	0.15	0.33	0.30	0.15	0.25	0.56	0.00	0.00
Queue Length 95th (ft)	0	0	0	37	0	0	23	86	0	0
Control Delay (s)	9.2	0.0	0.0	11.2	0.0	0.0	34.4	17.6	0.0	0.0
Lane LOS	A			B			D	C	A	A
Approach Delay (s)	0.0			3.1			19.3		0.0	
Approach LOS							C		A	

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	304	500	744	22	5	173
Peak Hour Factor	0.75	0.75	0.84	0.84	0.79	0.79
Hourly flow rate (vph)	405	667	886	26	6	219
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	912				2043	456
vC1, stage 1 conf vol					899	
vC2, stage 2 conf vol					1144	
vCu, unblocked vol	912				2043	456
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	44				94	60
cM capacity (veh/h)	724				110	543

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	405	333	333	590	321	225
Volume Left	405	0	0	0	0	6
Volume Right	0	0	0	0	26	219
cSH	724	1700	1700	1700	1700	489
Volume to Capacity	0.56	0.20	0.20	0.35	0.19	0.46
Queue Length 95th (ft)	88	0	0	0	0	60
Control Delay (s)	16.1	0.0	0.0	0.0	0.0	18.5
Lane LOS	C					C
Approach Delay (s)	6.1			0.0		18.5
Approach LOS						C

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	117	313	2	1	383	27	2	0	0	21	3	285
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	148	396	3	1	440	31	3	0	0	28	4	380
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	471			399			1518	1167	397	1135	1137	440
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	471			399			1518	1167	397	1135	1137	440
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			100			92	100	100	82	98	38
cM capacity (veh/h)	1075			1171			33	168	656	158	175	611

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	148	399	1	440	31	3	0	28	384
Volume Left	148	0	1	0	0	3	0	28	0
Volume Right	0	3	0	0	31	0	0	0	380
cSH	1075	1700	1171	1700	1700	33	1700	158	595
Volume to Capacity	0.14	0.23	0.00	0.26	0.02	0.08	0.00	0.18	0.65
Queue Length 95th (ft)	12	0	0	0	0	6	0	16	116
Control Delay (s)	8.9	0.0	8.1	0.0	0.0	124.7	0.0	32.6	21.4
Lane LOS	A		A			F	A	D	C
Approach Delay (s)	2.4		0.0			124.7		22.1	
Approach LOS						F		C	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

8: Dry Creek Road & Airport road

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	17	5	206	113	6	101
Peak Hour Factor	0.75	0.75	0.75	0.75	0.81	0.81
Hourly flow rate (vph)	23	7	275	151	7	125
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			208			
pX, platoon unblocked						
vC, conflicting volume	490	350			425	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	490	350			425	
tC, single (s)	6.6	6.4			4.3	
tC, 2 stage (s)						
tF (s)	3.7	3.5			2.4	
p0 queue free %	95	99			99	
cM capacity (veh/h)	502	652			1039	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	29	425	132
Volume Left	23	0	7
Volume Right	7	151	0
cSH	529	1700	1039
Volume to Capacity	0.06	0.25	0.01
Queue Length 95th (ft)	4	0	1
Control Delay (s)	12.2	0.0	0.5
Lane LOS	B		A
Approach Delay (s)	12.2	0.0	0.5
Approach LOS	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	27.7%	ICU Level of Service	A
Analysis Period (min)	15		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Golden Hill & Union

Cycle (sec):	100	Critical Vol./Cap.(X):	1.147
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	63.8
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Golden Hill						Union					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		0 0 1!	0 0		1 0 0	1 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	38	313	146	48	301	28	49	50	84	195	74	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	313	146	48	301	28	49	50	84	195	74	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	313	146	48	301	28	49	50	84	195	74	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.75	0.75	0.75	0.77	0.77	0.77	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	51	417	195	62	391	36	65	67	112	260	99	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	417	195	62	391	36	65	67	112	260	99	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	417	195	62	391	36	65	67	112	260	99	24
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.13	0.80	0.07	1.00	0.37	0.63	0.68	0.26	0.06
Final Sat.:	410	435	475	54	341	32	368	152	255	279	106	26
Capacity Analysis Module:												
Vol/Sat:	0.12	0.96	0.41	1.15	1.15	1.15	0.18	0.44	0.44	0.93	0.93	0.93
Crit Moves:		****		****				****		****		
Delay/Veh:	12.7	61.6	15.4	118.2	118	118.2	14.3	17.8	17.8	57.6	57.6	57.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	61.6	15.4	118.2	118	118.2	14.3	17.8	17.8	57.6	57.6	57.6
LOS by Move:	B	F	C	F	F	F	B	C	C	F	F	F
ApproachDel:	44.3			118.2			16.9			57.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	44.3			118.2			16.9			57.6		
LOS by Appr:	E			F			C			F		
AllWayAvgQ:	0.1	6.1	0.7	12.7	12.7	12.7	0.2	0.7	0.7	5.2	5.2	5.2

Note: Queue reported is the number of cars per lane.

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1481	1504	3343						1399	1404
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1481	1504	3343						1399	1404
Volume (vph)	0	561	266	575	736	0	0	0	0	164	0	100
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	1.00	1.00	1.00	0.88	0.88	0.88
Adj. Flow (vph)	0	603	286	599	767	0	0	0	0	186	0	114
RTOR Reduction (vph)	0	0	151	0	0	0	0	0	0	0	0	93
Lane Group Flow (vph)	0	603	135	599	767	0	0	0	0	0	186	21
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	5%	5%	20%	8%	0%	0%	0%	0%	29%	0%	15%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.3	26.3	38.0	68.4						17.2	17.2
Effective Green, g (s)		26.9	26.9	38.8	69.7						17.3	17.3
Actuated g/C Ratio		0.28	0.28	0.41	0.73						0.18	0.18
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		973	419	614	2453						255	256
v/s Ratio Prot		c0.18		c0.40	0.23							
v/s Ratio Perm			0.09								0.13	0.01
v/c Ratio		0.62	0.32	0.98	0.31						0.73	0.08
Uniform Delay, d1		29.6	26.9	27.6	4.4						36.6	32.3
Progression Factor		1.00	1.00	1.22	0.49						1.00	1.00
Incremental Delay, d2		3.0	2.0	23.2	0.2						10.0	0.1
Delay (s)		32.6	28.9	56.9	2.3						46.6	32.4
Level of Service		C	C	E	A						D	C
Approach Delay (s)		31.4			26.2			0.0			41.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	29.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.86	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1504	3282			3118		1570	1430			1644	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1504	3282			3118		1570	1430			1644	
Volume (vph)	179	546	0	0	945	102	364	1	477	0	0	2
Peak-hour factor, PHF	0.93	0.93	0.93	0.97	0.97	0.97	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	192	587	0	0	974	105	409	1	536	0	0	3
RTOR Reduction (vph)	0	0	0	0	0	0	0	253	0	0	0	0
Lane Group Flow (vph)	192	587	0	0	1079	0	409	284	0	0	3	0
Confl. Peds. (#/hr)	10		10	10		10						
Heavy Vehicles (%)	20%	10%	0%	0%	12%	30%	15%	0%	13%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	12.0	55.8			38.7		24.0	24.0			1.0	
Effective Green, g (s)	12.0	56.9			40.9		25.1	25.1			1.0	
Actuated g/C Ratio	0.13	0.60			0.43		0.26	0.26			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	190	1966			1342		415	378			17	
v/s Ratio Prot	c0.13	0.18			c0.35		c0.26	0.20			c0.00	
v/s Ratio Perm												
v/c Ratio	1.01	0.30			0.80		0.99	0.75			0.18	
Uniform Delay, d1	41.5	9.3			23.6		34.8	32.1			46.6	
Progression Factor	1.49	0.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	60.6	0.3			5.2		40.2	9.2			1.8	
Delay (s)	122.4	0.3			28.8		75.0	41.2			48.4	
Level of Service	F	A			C		E	D			D	
Approach Delay (s)		30.4			28.8			55.8			48.4	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM Average Control Delay	38.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3112	1499	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3112	1499	1719	1538
Volume (vph)	246	789	987	75	77	155
Peak-hour factor, PHF	0.97	0.97	0.92	0.92	0.94	0.94
Adj. Flow (vph)	254	813	1073	82	82	165
RTOR Reduction (vph)	0	0	0	35	0	144
Lane Group Flow (vph)	254	813	1073	47	82	21
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	16%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	21.5	111.2	60.5	60.5	13.5	13.5
Effective Green, g (s)	21.0	111.2	63.8	63.8	14.4	14.4
Actuated g/C Ratio	0.19	1.00	0.57	0.57	0.13	0.13
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	325	3223	1785	860	223	199
v/s Ratio Prot	c0.15	0.25	c0.34		c0.05	
v/s Ratio Perm				0.03		0.01
v/c Ratio	0.78	0.25	0.60	0.05	0.37	0.11
Uniform Delay, d1	42.9	0.0	15.4	10.4	44.2	42.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.9	0.0	1.5	0.1	1.2	0.3
Delay (s)	54.8	0.0	16.9	10.6	45.5	43.0
Level of Service	D	A	B	B	D	D
Approach Delay (s)		13.1	16.5		43.8	
Approach LOS		B	B		D	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.99			0.99			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1719	3042		1719	3017			1727			1689	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (perm)	1719	3042		1719	3017			1727			1689	
Volume (vph)	56	608	202	49	782	51	193	62	22	80	98	87
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.98	0.98	0.98	0.87	0.87	0.87
Adj. Flow (vph)	60	654	217	58	931	61	197	63	22	92	113	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	60	871	0	58	992	0	0	282	0	0	305	0
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	8.3	60.8		8.2	60.7			29.5			30.7	
Effective Green, g (s)	7.8	64.1		7.7	64.0			30.4			31.6	
Actuated g/C Ratio	0.05	0.43		0.05	0.43			0.20			0.21	
Clearance Time (s)	3.5	7.3		3.5	7.3			4.9			4.9	
Vehicle Extension (s)	2.0	3.0		2.0	3.0			3.5			3.5	
Lane Grp Cap (vph)	90	1302		88	1289			350			356	
v/s Ratio Prot	c0.03	0.29		0.03	c0.33			c0.16			c0.18	
v/s Ratio Perm												
v/c Ratio	0.67	0.67		0.66	0.77			0.81			0.86	
Uniform Delay, d1	69.7	34.3		69.8	36.6			56.9			56.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	13.5	2.7		12.8	4.5			13.0			18.4	
Delay (s)	83.2	37.1		82.5	41.1			69.9			75.3	
Level of Service	F	D		F	D			E			E	
Approach Delay (s)		40.1			43.4			69.9			75.3	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM Average Control Delay	48.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	149.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	674	40	229	905	0	23	0	218	0	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	812	48	260	1028	0	31	0	291	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1028			860			1873	2387	430	2248	2412	514
vC1, stage 1 conf vol							839	839		1549	1549	
vC2, stage 2 conf vol							1035	1549		699	863	
vCu, unblocked vol	1028			860			1873	2387	430	2248	2412	514
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			66			78	100	49	100	100	100
cM capacity (veh/h)	683			758			140	108	565	8	82	511

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	1	541	319	260	686	343	31	291	0	0
Volume Left	1	0	0	260	0	0	31	0	0	0
Volume Right	0	0	48	0	0	0	0	291	0	0
cSH	683	1700	1700	758	1700	1700	140	565	1700	1700
Volume to Capacity	0.00	0.32	0.19	0.34	0.40	0.20	0.22	0.51	0.00	0.00
Queue Length 95th (ft)	0	0	0	38	0	0	20	73	0	0
Control Delay (s)	10.3	0.0	0.0	12.2	0.0	0.0	37.9	17.9	0.0	0.0
Lane LOS	B			B			E	C	A	A
Approach Delay (s)	0.0			2.5			19.8		0.0	
Approach LOS							C		A	

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	166	726	786	19	5	348
Peak Hour Factor	0.95	0.95	0.91	0.91	0.77	0.77
Hourly flow rate (vph)	175	764	864	21	6	452
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	885				1606	442
vC1, stage 1 conf vol					874	
vC2, stage 2 conf vol					732	
vCu, unblocked vol	885				1606	442
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	76				97	19
cM capacity (veh/h)	742				255	555

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	175	382	382	576	309	458
Volume Left	175	0	0	0	0	6
Volume Right	0	0	0	0	21	452
cSH	742	1700	1700	1700	1700	546
Volume to Capacity	0.24	0.22	0.22	0.34	0.18	0.84
Queue Length 95th (ft)	23	0	0	0	0	219
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	37.2
Lane LOS	B					E
Approach Delay (s)	2.1			0.0		37.2
Approach LOS						E

Intersection Summary			
Average Delay	8.3		
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	188	503	2	0	531	17	1	0	3	26	0	138
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	209	559	2	0	603	19	1	0	4	35	0	184
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			561			1765	1601	560	1584	1582	603
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			561			1765	1601	560	1584	1582	603
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	78			100			96	100	99	51	100	63
cM capacity (veh/h)	944			1020			34	83	532	71	86	493

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	209	561	0	603	19	1	4	35	184
Volume Left	209	0	0	0	0	1	0	35	0
Volume Right	0	2	0	0	19	0	4	0	184
cSH	944	1700	1700	1700	1700	34	532	71	493
Volume to Capacity	0.22	0.33	0.00	0.35	0.01	0.04	0.01	0.49	0.37
Queue Length 95th (ft)	21	0	0	0	0	3	1	50	43
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	113.7	11.8	96.7	16.6
Lane LOS	A					F	B	F	C
Approach Delay (s)	2.7		0.0			37.3		29.3	
Approach LOS						E		D	

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

8: Dry Creek Rd & Airport Rd

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	120	5	114	22	4	239
Peak Hour Factor	0.75	0.75	0.90	0.90	0.77	0.77
Hourly flow rate (vph)	160	7	127	24	5	310
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			205			
pX, platoon unblocked						
vC, conflicting volume	460	139			151	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	460	139			151	
tC, single (s)	6.6	6.4			4.3	
tC, 2 stage (s)						
tF (s)	3.7	3.5			2.4	
p0 queue free %	69	99			100	
cM capacity (veh/h)	524	861			1322	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	167	151	316
Volume Left	160	0	5
Volume Right	7	24	0
cSH	532	1700	1322
Volume to Capacity	0.31	0.09	0.00
Queue Length 95th (ft)	33	0	0
Control Delay (s)	14.8	0.0	0.2
Lane LOS	B		A
Approach Delay (s)	14.8	0.0	0.2
Approach LOS	B		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	29.4%	ICU Level of Service	A
Analysis Period (min)	15		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Golden Hill & Union

Cycle (sec): 100 Critical Vol./Cap.(X): 0.653
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 0 Level Of Service: C

Street Name:	Golden Hill						Union					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		0 0 1!	0 0		1 0 0	1 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	40	180	113	16	236	45	36	77	73	154	105	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	180	113	16	236	45	36	77	73	154	105	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Aptos_Villa:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	180	113	16	236	45	36	77	73	154	105	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.86	0.86	0.86	0.95	0.95	0.95
PHF Volume:	43	194	122	18	268	51	42	90	85	162	111	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	194	122	18	268	51	42	90	85	162	111	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	194	122	18	268	51	42	90	85	162	111	18
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.05	0.80	0.15	1.00	0.51	0.49	0.56	0.38	0.06
Final Sat.:	470	503	557	28	411	78	438	251	238	272	186	30
Capacity Analysis Module:												
Vol/Sat:	0.09	0.38	0.22	0.65	0.65	0.65	0.10	0.36	0.36	0.60	0.60	0.60
Crit Moves:		****				****		****		****		
Delay/Veh:	10.7	13.4	10.4	20.4	20.4	20.4	11.1	12.8	12.8	18.9	18.9	18.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.7	13.4	10.4	20.4	20.4	20.4	11.1	12.8	12.8	18.9	18.9	18.9
LOS by Move:	B	B	B	C	C	C	B	B	B	C	C	C
ApproachDel:		12.0			20.4			12.5			18.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.0			20.4			12.5			18.9	
LOS by Appr:		B			C			B			C	
AllWayAvgQ:	0.1	0.5	0.2	1.5	1.5	1.5	0.1	0.4	0.4	1.2	1.2	1.2

Note: Queue reported is the number of cars per lane.

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1429	1597	3406						1367	1223
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1429	1597	3406						1367	1223
Volume (vph)	0	452	327	467	486	0	0	0	0	117	0	50
Peak-hour factor, PHF	0.96	0.96	0.96	0.84	0.84	0.84	1.00	1.00	1.00	0.84	0.84	0.84
Adj. Flow (vph)	0	471	341	556	579	0	0	0	0	139	0	60
RTOR Reduction (vph)	0	0	221	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	471	120	556	579	0	0	0	0	0	139	9
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	0%	5%	13%	13%	6%	0%	0%	0%	0%	32%	0%	32%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		29.1	29.1	38.0	71.2						14.4	14.4
Effective Green, g (s)		29.7	29.7	38.8	72.5						14.5	14.5
Actuated g/C Ratio		0.31	0.31	0.41	0.76						0.15	0.15
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1075	447	652	2599						209	187
v/s Ratio Prot		c0.14		c0.35	0.17							
v/s Ratio Perm			0.08								0.10	0.01
v/c Ratio		0.44	0.27	0.85	0.22						0.67	0.05
Uniform Delay, d1		26.0	24.5	25.5	3.2						38.0	34.4
Progression Factor		1.00	1.00	1.30	0.34						1.00	1.00
Incremental Delay, d2		1.3	1.5	8.5	0.2						7.7	0.1
Delay (s)		27.3	26.0	41.6	1.3						45.7	34.5
Level of Service		C	C	D	A						D	C
Approach Delay (s)		26.7			21.0			0.0			42.3	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.98		1.00	0.85			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1399	3374			3179		1570	1405			1738	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (perm)	1399	3374			3179		1570	1405			1738	
Volume (vph)	61	508	0	0	780	121	170	1	532	4	0	3
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.75	0.75	0.75
Adj. Flow (vph)	67	558	0	0	897	139	221	1	691	5	0	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	266	0	0	0	0
Lane Group Flow (vph)	67	558	0	0	1036	0	221	426	0	0	9	0
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	29%	7%	0%	0%	8%	29%	15%	0%	15%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	8.3	55.8			42.4		24.0	24.0			1.0	
Effective Green, g (s)	8.3	56.9			44.6		25.1	25.1			1.0	
Actuated g/C Ratio	0.09	0.60			0.47		0.26	0.26			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	122	2021			1492		415	371			18	
v/s Ratio Prot	c0.05	0.17			c0.33		0.14	c0.30			c0.01	
v/s Ratio Perm												
v/c Ratio	0.55	0.28			0.69		0.53	1.15			0.50	
Uniform Delay, d1	41.6	9.2			19.8		29.9	35.0			46.8	
Progression Factor	1.53	0.02			1.00		1.00	1.00			1.00	
Incremental Delay, d2	4.7	0.3			2.7		2.0	93.2			7.7	
Delay (s)	68.1	0.5			22.5		32.0	128.1			54.5	
Level of Service	E	A			C		C	F			D	
Approach Delay (s)		7.7			22.5			104.8			54.5	
Approach LOS		A			C			F			D	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3223	1503	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3223	1503	1719	1538
Volume (vph)	243	827	706	192	179	224
Peak-hour factor, PHF	0.78	0.78	0.83	0.83	0.81	0.81
Adj. Flow (vph)	312	1060	851	231	221	277
RTOR Reduction (vph)	0	0	0	144	0	210
Lane Group Flow (vph)	312	1060	851	87	221	67
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	12%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	21.3	86.0	29.0	29.0	20.0	20.0
Effective Green, g (s)	20.8	86.0	32.3	32.3	20.9	20.9
Actuated g/C Ratio	0.24	1.00	0.38	0.38	0.24	0.24
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	416	3223	1210	564	418	374
v/s Ratio Prot	c0.18	0.33	c0.26		c0.13	
v/s Ratio Perm				0.06		0.04
v/c Ratio	0.75	0.33	0.70	0.15	0.53	0.18
Uniform Delay, d1	30.2	0.0	22.8	17.8	28.3	25.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.7	0.1	1.9	0.2	1.4	0.3
Delay (s)	37.8	0.1	24.7	17.9	29.7	26.0
Level of Service	D	A	C	B	C	C
Approach Delay (s)		8.7	23.3		27.6	
Approach LOS		A	C		C	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.99			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1719	3037		1719	3127			1733			1683	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (perm)	1719	3037		1719	3127			1733			1683	
Volume (vph)	123	663	219	47	573	72	258	106	26	73	56	67
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.75	0.75	0.75	0.85	0.85	0.85
Adj. Flow (vph)	137	737	243	54	659	83	344	141	35	86	66	79
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	137	980	0	54	742	0	0	520	0	0	231	0
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	16.0	54.3		8.1	46.4			51.0			25.9	
Effective Green, g (s)	15.5	57.6		7.6	49.7			51.9			26.8	
Actuated g/C Ratio	0.10	0.36		0.05	0.31			0.32			0.17	
Clearance Time (s)	3.5	7.3		3.5	7.3			4.9			4.9	
Vehicle Extension (s)	2.0	3.0		2.0	3.0			3.5			3.5	
Lane Grp Cap (vph)	167	1094		82	972			562			282	
v/s Ratio Prot	c0.08	c0.32		0.03	0.24			c0.30			c0.14	
v/s Ratio Perm												
v/c Ratio	0.82	0.90		0.66	0.76			0.93			0.82	
Uniform Delay, d1	70.8	48.3		74.9	49.8			52.1			64.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	25.3	9.7		13.6	3.6			21.5			17.1	
Delay (s)	96.2	58.0		88.5	53.4			73.6			81.3	
Level of Service	F	E		F	D			E			F	
Approach Delay (s)		62.7			55.8			73.6			81.3	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM Average Control Delay	64.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	159.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	769	27	252	664	1	30	0	342	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	961	34	290	763	1	40	0	456	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	764			995			1942	2324	498	2282	2341	382
vC1, stage 1 conf vol							981	981		1343	1343	
vC2, stage 2 conf vol							961	1344		939	998	
vCu, unblocked vol	764			995			1942	2324	498	2282	2341	382
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			57			69	100	11	100	100	100
cM capacity (veh/h)	858			673			129	115	510	2	33	622

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	1	641	354	290	509	256	40	456	0	0
Volume Left	1	0	0	290	0	0	40	0	0	0
Volume Right	0	0	34	0	0	1	0	456	0	0
cSH	858	1700	1700	673	1700	1700	129	510	1700	1700
Volume to Capacity	0.00	0.38	0.21	0.43	0.30	0.15	0.31	0.89	0.00	0.00
Queue Length 95th (ft)	0	0	0	54	0	0	30	253	0	0
Control Delay (s)	9.2	0.0	0.0	14.3	0.0	0.0	45.0	46.5	0.0	0.0
Lane LOS	A			B			E	E	A	A
Approach Delay (s)	0.0			3.9			46.4		0.0	
Approach LOS							E		A	

Intersection Summary			
Average Delay	10.7		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

6: SR 46 East & Airport road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	611	500	744	22	5	173
Peak Hour Factor	0.75	0.75	0.84	0.84	0.79	0.79
Hourly flow rate (vph)	815	667	886	26	6	219
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	912				2861	456
vC1, stage 1 conf vol					899	
vC2, stage 2 conf vol					1963	
vCu, unblocked vol	912				2861	456
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	0				0	60
cM capacity (veh/h)	724				0	543

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	815	333	333	590	321	225
Volume Left	815	0	0	0	0	6
Volume Right	0	0	0	0	26	219
cSH	724	1700	1700	1700	1700	0
Volume to Capacity	1.12	0.20	0.20	0.35	0.19	Err
Queue Length 95th (ft)	600	0	0	0	0	Err
Control Delay (s)	95.5	0.0	0.0	0.0	0.0	Err
Lane LOS	F					F
Approach Delay (s)	52.5			0.0		Err
Approach LOS						F

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

7: SR 46 East & Dry Creek Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	117	313	2	1	383	30	2	0	0	21	3	285
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	148	396	3	1	440	34	3	0	0	28	4	380
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	475			399			1518	1171	397	1135	1137	440
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	475			399			1518	1171	397	1135	1137	440
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			100			92	100	100	82	98	38
cM capacity (veh/h)	1072			1171			33	167	656	158	175	611

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	148	399	1	440	34	3	0	28	384
Volume Left	148	0	1	0	0	3	0	28	0
Volume Right	0	3	0	0	34	0	0	0	380
cSH	1072	1700	1171	1700	1700	33	1700	158	595
Volume to Capacity	0.14	0.23	0.00	0.26	0.02	0.08	0.00	0.18	0.65
Queue Length 95th (ft)	12	0	0	0	0	6	0	16	116
Control Delay (s)	8.9	0.0	8.1	0.0	0.0	124.7	0.0	32.6	21.4
Lane LOS	A		A			F	A	D	C
Approach Delay (s)	2.4		0.0			124.7		22.1	
Approach LOS						F		C	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

8: Dry Creek Road & Airport road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	0	17	0	11	0	513	113	6	101	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.75	0.75	0.75	0.75	0.81	0.81	0.81
Hourly flow rate (vph)	0	0	0	23	0	15	0	684	151	7	125	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								208				
pX, platoon unblocked												
vC, conflicting volume	914	974	125	899	899	759	125			835		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	914	974	125	899	899	759	125			835		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)												
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	100	100	100	91	100	96	100			99		
cM capacity (veh/h)	224	231	877	239	257	377	1352			723		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	37	835	132
Volume Left	0	23	0	7
Volume Right	0	15	151	0
cSH	1700	279	1352	723
Volume to Capacity	0.00	0.13	0.00	0.01
Queue Length 95th (ft)	0	11	0	1
Control Delay (s)	0.0	19.9	0.0	0.7
Lane LOS	A	C		A
Approach Delay (s)	0.0	19.9	0.0	0.7
Approach LOS	A	C		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

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                      Level Of Service Computation Report
            2000 HCM 4-Way Stop Method (Future Volume Alternative)
******************************************************************************
Intersection #9 Golden Hill & Union
******************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         1.192
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):        70.8
Optimal Cycle:         0                Level Of Service:                 F
******************************************************************************
Street Name:           Golden Hill                          Union
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  0  1  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      38  313   146    48  301    28    49   50    84   195   74    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   38  313   146    48  301    28    49   50    84   195   74    18
Added Vol:      0    5    46     0    0     0     4   32     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   38  318   192    48  301    28    53   82    84   195   74    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.77 0.77  0.77  0.75 0.75  0.75  0.75 0.75  0.75
PHF Volume:    51  424   256    62  391    36    71  109   112   260   99    24
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   51  424   256    62  391    36    71  109   112   260   99    24
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   51  424   256    62  391    36    71  109   112   260   99    24
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  1.00  0.13 0.80  0.07  1.00 0.49  0.51  0.68 0.26  0.06
Final Sat.:   399  423   461    52  328    31   368  199   204   272  103    25
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 1.00  0.55  1.19 1.19  1.19  0.19 0.55  0.55  0.96 0.96  0.96
Crit Moves:       ****        ****                   ****        ****
Delay/Veh:   13.0 73.4  19.8 136.0  136 136.0  14.7 21.7  21.7  64.8 64.8  64.8
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  13.0 73.4  19.8 136.0  136 136.0  14.7 21.7  21.7  64.8 64.8  64.8
LOS by Move:    B    F     C     F    F     F     B    C     C     F    F     F
ApproachDel:      50.5            136.0             20.0             64.8
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:       50.5            136.0             20.0             64.8
LOS by Appr:         F                F                C                F
AllWayAvgQ:   0.1  7.3   1.2  14.2 14.2  14.2   0.2  1.1   1.1   5.9  5.9   5.9
******************************************************************************
Note: Queue reported is the number of cars per lane.
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1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1481	1504	3343						1399	1404
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1481	1504	3343						1399	1404
Volume (vph)	0	561	266	693	798	0	0	0	0	164	0	100
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	1.00	1.00	1.00	0.88	0.88	0.88
Adj. Flow (vph)	0	603	286	722	831	0	0	0	0	186	0	114
RTOR Reduction (vph)	0	0	151	0	0	0	0	0	0	0	0	93
Lane Group Flow (vph)	0	603	135	722	831	0	0	0	0	0	186	21
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	5%	5%	20%	8%	0%	0%	0%	0%	29%	0%	15%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.3	26.3	38.0	68.4						17.2	17.2
Effective Green, g (s)		26.9	26.9	38.8	69.7						17.3	17.3
Actuated g/C Ratio		0.28	0.28	0.41	0.73						0.18	0.18
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		973	419	614	2453						255	256
v/s Ratio Prot		c0.18		c0.48	0.25							
v/s Ratio Perm			0.09								0.13	0.01
v/c Ratio		0.62	0.32	1.18	0.34						0.73	0.08
Uniform Delay, d1		29.6	26.9	28.1	4.5						36.6	32.3
Progression Factor		1.00	1.00	1.17	0.45						1.00	1.00
Incremental Delay, d2		3.0	2.0	86.9	0.1						10.0	0.1
Delay (s)		32.6	28.9	119.7	2.1						46.6	32.4
Level of Service		C	C	F	A						D	C
Approach Delay (s)		31.4			56.8			0.0			41.2	
Approach LOS		C			E			A			D	

Intersection Summary			
HCM Average Control Delay	46.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.86	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1504	3282			3115		1570	1430			1644	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1504	3282			3115		1570	1430			1644	
Volume (vph)	179	546	0	0	1124	124	364	1	477	0	0	2
Peak-hour factor, PHF	0.93	0.93	0.93	0.97	0.97	0.97	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	192	587	0	0	1159	128	409	1	536	0	0	3
RTOR Reduction (vph)	0	0	0	0	0	0	0	253	0	0	0	0
Lane Group Flow (vph)	192	587	0	0	1287	0	409	284	0	0	3	0
Confl. Peds. (#/hr)	10		10	10		10						
Heavy Vehicles (%)	20%	10%	0%	0%	12%	30%	15%	0%	13%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	12.0	55.8			38.7		24.0	24.0			1.0	
Effective Green, g (s)	12.0	56.9			40.9		25.1	25.1			1.0	
Actuated g/C Ratio	0.13	0.60			0.43		0.26	0.26			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	190	1966			1341		415	378			17	
v/s Ratio Prot	c0.13	0.18			c0.41		c0.26	0.20			c0.00	
v/s Ratio Perm												
v/c Ratio	1.01	0.30			0.96		0.99	0.75			0.18	
Uniform Delay, d1	41.5	9.3			26.3		34.8	32.1			46.6	
Progression Factor	1.49	0.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	60.6	0.3			16.7		40.2	9.2			1.8	
Delay (s)	122.4	0.3			42.9		75.0	41.2			48.4	
Level of Service	F	A			D		E	D			D	
Approach Delay (s)		30.4			42.9			55.8			48.4	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM Average Control Delay	43.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3112	1499	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3112	1499	1719	1538
Volume (vph)	246	789	1189	88	77	155
Peak-hour factor, PHF	0.97	0.97	0.92	0.92	0.94	0.94
Adj. Flow (vph)	254	813	1292	96	82	165
RTOR Reduction (vph)	0	0	0	41	0	144
Lane Group Flow (vph)	254	813	1292	55	82	21
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	16%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	21.5	111.2	60.5	60.5	13.5	13.5
Effective Green, g (s)	21.0	111.2	63.8	63.8	14.4	14.4
Actuated g/C Ratio	0.19	1.00	0.57	0.57	0.13	0.13
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	325	3223	1785	860	223	199
v/s Ratio Prot	c0.15	0.25	c0.42		c0.05	
v/s Ratio Perm				0.04		0.01
v/c Ratio	0.78	0.25	0.72	0.06	0.37	0.11
Uniform Delay, d1	42.9	0.0	17.3	10.5	44.2	42.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.9	0.0	2.6	0.1	1.2	0.3
Delay (s)	54.8	0.0	19.9	10.6	45.5	43.0
Level of Service	D	A	B	B	D	D
Approach Delay (s)		13.1	19.2		43.8	
Approach LOS		B	B		D	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.99			0.99			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1719	3042		1719	3019			1727			1689	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (perm)	1719	3042		1719	3019			1727			1689	
Volume (vph)	56	608	202	58	996	57	193	62	22	80	98	87
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.98	0.98	0.98	0.87	0.87	0.87
Adj. Flow (vph)	60	654	217	69	1186	68	197	63	22	92	113	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	60	871	0	69	1254	0	0	282	0	0	305	0
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	8.3	60.7		9.0	61.4			29.7			30.7	
Effective Green, g (s)	7.8	64.0		8.5	64.7			30.6			31.6	
Actuated g/C Ratio	0.05	0.42		0.06	0.43			0.20			0.21	
Clearance Time (s)	3.5	7.3		3.5	7.3			4.9			4.9	
Vehicle Extension (s)	2.0	3.0		2.0	3.0			3.5			3.5	
Lane Grp Cap (vph)	89	1292		97	1296			351			354	
v/s Ratio Prot	0.03	0.29		c0.04	c0.42			c0.16			c0.18	
v/s Ratio Perm												
v/c Ratio	0.67	0.67		0.71	0.97			0.80			0.86	
Uniform Delay, d1	70.2	34.9		69.9	42.0			57.2			57.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	14.7	2.8		18.4	18.4			12.8			19.2	
Delay (s)	84.9	37.8		88.3	60.3			70.0			76.7	
Level of Service	F	D		F	E			E			E	
Approach Delay (s)		40.8			61.8			70.0			76.7	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM Average Control Delay	57.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	674	40	307	1134	0	23	0	218	0	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	812	48	349	1289	0	31	0	291	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1289			860			2181	2825	430	2685	2849	644
vC1, stage 1 conf vol							839	839		1986	1986	
vC2, stage 2 conf vol							1342	1986		699	863	
vCu, unblocked vol	1289			860			2181	2825	430	2685	2849	644
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			54			61	100	49	100	100	100
cM capacity (veh/h)	545			758			79	55	565	3	23	420

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	1	541	319	349	859	430	31	291	0	0
Volume Left	1	0	0	349	0	0	31	0	0	0
Volume Right	0	0	48	0	0	0	0	291	0	0
cSH	545	1700	1700	758	1700	1700	79	565	1700	1700
Volume to Capacity	0.00	0.32	0.19	0.46	0.51	0.25	0.39	0.51	0.00	0.00
Queue Length 95th (ft)	0	0	0	61	0	0	38	73	0	0
Control Delay (s)	11.6	0.0	0.0	13.7	0.0	0.0	77.5	17.9	0.0	0.0
Lane LOS	B			B			F	C	A	A
Approach Delay (s)	0.0			2.9			23.6		0.0	
Approach LOS							C		A	

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

6: SR 46 East & Airport Rd

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	166	726	786	19	5	655
Peak Hour Factor	0.95	0.95	0.91	0.91	0.77	0.77
Hourly flow rate (vph)	175	764	864	21	6	851
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	885				1606	442
vC1, stage 1 conf vol					874	
vC2, stage 2 conf vol					732	
vCu, unblocked vol	885				1606	442
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	76				97	0
cM capacity (veh/h)	742				255	555

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	175	382	382	576	309	857
Volume Left	175	0	0	0	0	6
Volume Right	0	0	0	0	21	851
cSH	742	1700	1700	1700	1700	550
Volume to Capacity	0.24	0.22	0.22	0.34	0.18	1.56
Queue Length 95th (ft)	23	0	0	0	0	1137
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	280.2
Lane LOS	B					F
Approach Delay (s)	2.1			0.0		280.2
Approach LOS						F

Intersection Summary			
Average Delay	90.3		
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

7: SR 46 East & Jardine Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	188	503	2	0	531	17	1	0	3	29	0	138
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	209	559	2	0	603	19	1	0	4	39	0	184
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			561			1765	1601	560	1584	1582	603
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			561			1765	1601	560	1584	1582	603
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	78			100			96	100	99	46	100	63
cM capacity (veh/h)	944			1020			34	83	532	71	86	493

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	209	561	0	603	19	1	4	39	184
Volume Left	209	0	0	0	0	1	0	39	0
Volume Right	0	2	0	0	19	0	4	0	184
cSH	944	1700	1700	1700	1700	34	532	71	493
Volume to Capacity	0.22	0.33	0.00	0.35	0.01	0.04	0.01	0.54	0.37
Queue Length 95th (ft)	21	0	0	0	0	3	1	57	43
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	113.7	11.8	104.6	16.6
Lane LOS	A					F	B	F	C
Approach Delay (s)	2.7		0.0			37.3		31.9	
Approach LOS						E		D	

Intersection Summary			
Average Delay	5.8		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

8: Dry Creek Rd & Airport Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	3	142	120	0	5	0	114	22	7	404	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.75	0.90	0.90	0.90	0.77	0.77	0.77
Hourly flow rate (vph)	3	3	154	160	0	7	0	127	24	9	525	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								205				
pX, platoon unblocked												
vC, conflicting volume	688	694	525	838	682	139	525			151		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	688	694	525	838	682	139	525			151		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)												
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	99	99	70	13	100	99	100			99		
cM capacity (veh/h)	332	341	517	184	347	861	952			1322		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	161	167	151	534
Volume Left	3	160	0	9
Volume Right	154	7	24	0
cSH	506	190	952	1322
Volume to Capacity	0.32	0.88	0.00	0.01
Queue Length 95th (ft)	34	165	0	1
Control Delay (s)	15.4	87.4	0.0	0.2
Lane LOS	C	F		A
Approach Delay (s)	15.4	87.4	0.0	0.2
Approach LOS	C	F		

Intersection Summary			
Average Delay	16.9		
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Golden Hill & Union

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.770
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): 20.6
Optimal Cycle: 0 | Level Of Service: C

Street Name:	Golden Hill						Union					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		0 0 1!	0 0		1 0 0	1 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	40	180	113	16	236	45	36	77	73	154	105	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	180	113	16	236	45	36	77	73	154	105	17
Added Vol:	0	0	0	0	5	4	0	0	0	46	32	0
Aptos_Villa:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	180	113	16	241	49	36	77	73	200	137	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.86	0.86	0.86	0.95	0.95	0.95
PHF Volume:	43	194	122	18	274	56	42	90	85	211	144	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	194	122	18	274	56	42	90	85	211	144	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	194	122	18	274	56	42	90	85	211	144	18
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.05	0.79	0.16	1.00	0.51	0.49	0.56	0.39	0.05
Final Sat.:	440	468	515	25	384	78	415	236	224	273	187	23
Capacity Analysis Module:												
Vol/Sat:	0.10	0.41	0.24	0.71	0.71	0.71	0.10	0.38	0.38	0.77	0.77	0.77
Crit Moves:		****			****			****			****	
Delay/Veh:	11.2	14.5	11.1	24.4	24.4	24.4	11.5	13.6	13.6	28.8	28.8	28.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	14.5	11.1	24.4	24.4	24.4	11.5	13.6	13.6	28.8	28.8	28.8
LOS by Move:	B	B	B	C	C	C	B	B	B	D	D	D
ApproachDel:		13.0			24.4			13.2			28.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.0			24.4			13.2			28.8	
LOS by Appr:		B			C			B			D	
AllWayAvgQ:	0.1	0.6	0.3	1.9	1.9	1.9	0.1	0.5	0.5	2.5	2.5	2.5

Note: Queue reported is the number of cars per lane.

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		4940	1429	3099	3406						1367	1223
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		4940	1429	3099	3406						1367	1223
Volume (vph)	0	452	327	467	486	0	0	0	0	117	0	50
Peak-hour factor, PHF	0.96	0.96	0.96	0.84	0.84	0.84	1.00	1.00	1.00	0.84	0.84	0.84
Adj. Flow (vph)	0	471	341	556	579	0	0	0	0	139	0	60
RTOR Reduction (vph)	0	0	234	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	471	107	556	579	0	0	0	0	0	139	9
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	0%	5%	13%	13%	6%	0%	0%	0%	0%	32%	0%	32%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		29.1	29.1	38.0	71.2						14.4	14.4
Effective Green, g (s)		29.7	29.7	38.8	72.5						14.5	14.5
Actuated g/C Ratio		0.31	0.31	0.41	0.76						0.15	0.15
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1544	447	1266	2599						209	187
v/s Ratio Prot		c0.10		c0.18	0.17							
v/s Ratio Perm			0.07								0.10	0.01
v/c Ratio		0.31	0.24	0.44	0.22						0.67	0.05
Uniform Delay, d1		24.8	24.3	20.3	3.2						38.0	34.4
Progression Factor		1.00	1.00	0.47	1.11						1.00	1.00
Incremental Delay, d2		0.5	1.3	0.2	0.2						7.7	0.1
Delay (s)		25.3	25.5	9.7	3.8						45.7	34.5
Level of Service		C	C	A	A						D	C
Approach Delay (s)		25.4			6.7			0.0			42.3	
Approach LOS		C			A			A			D	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.98		1.00	0.85			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1399	3374			5755		1570	1405			1738	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.97	
Satd. Flow (perm)	1399	3374			5755		1570	1405			1738	
Volume (vph)	61	508	0	0	780	121	170	1	532	4	0	3
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.75	0.75	0.75
Adj. Flow (vph)	67	558	0	0	897	139	221	1	691	5	0	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	207	0	0	0	0
Lane Group Flow (vph)	67	558	0	0	1036	0	221	485	0	0	9	0
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	29%	7%	0%	0%	8%	29%	15%	0%	15%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	6.4	49.1			37.6		30.9	30.9			0.8	
Effective Green, g (s)	6.4	50.2			39.8		32.0	32.0			0.8	
Actuated g/C Ratio	0.07	0.53			0.42		0.34	0.34			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	94	1783			2411		529	473			15	
v/s Ratio Prot	c0.05	0.17			c0.18		0.14	c0.35			c0.01	
v/s Ratio Perm												
v/c Ratio	0.71	0.31			0.43		0.42	1.03			0.60	
Uniform Delay, d1	43.4	12.7			19.6		24.3	31.5			46.9	
Progression Factor	0.67	0.48			1.00		1.00	1.00			1.00	
Incremental Delay, d2	21.9	0.4			0.6		0.9	48.1			36.3	
Delay (s)	50.8	6.5			20.1		25.2	79.6			83.2	
Level of Service	D	A			C		C	E			F	
Approach Delay (s)		11.3			20.1			66.4			83.2	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3112	1492	3335	3167	1494	3335	3325		3335	1810	1515
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3112	1492	3335	3167	1494	3335	3325		3335	1810	1515
Volume (vph)	123	663	219	47	573	72	258	106	26	73	56	67
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.75	0.75	0.75	0.85	0.85	0.85
Adj. Flow (vph)	137	737	243	54	659	83	344	141	35	86	66	79
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	137	737	243	54	659	83	344	176	0	86	66	79
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						7
Actuated Green, G (s)	5.3	25.2	25.2	1.8	21.7	21.7	17.3	15.3		9.6	7.6	9.6
Effective Green, g (s)	4.8	28.5	28.5	1.3	25.0	25.0	18.2	16.2		10.5	8.5	10.5
Actuated g/C Ratio	0.07	0.39	0.39	0.02	0.34	0.34	0.25	0.22		0.14	0.12	0.14
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	221	1223	587	60	1092	515	837	743		483	212	219
v/s Ratio Prot	c0.04	c0.24		0.02	0.21		c0.10	0.05		0.03	c0.04	
v/s Ratio Perm			0.16			0.06						0.05
v/c Ratio	0.62	0.60	0.41	0.90	0.60	0.16	0.41	0.24		0.18	0.31	0.36
Uniform Delay, d1	33.0	17.5	15.9	35.5	19.6	16.5	22.7	23.1		27.2	29.3	28.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.6	0.8	0.5	79.8	0.9	0.1	0.4	0.2		0.2	1.0	1.2
Delay (s)	36.6	18.3	16.4	115.4	20.6	16.6	23.1	23.3		27.4	30.3	29.2
Level of Service	D	B	B	F	C	B	C	C		C	C	C
Approach Delay (s)		20.2			26.6			23.1			28.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	72.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	769	27	252	664	1	0	0	342	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	961	34	290	763	1	0	0	456	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	764			995			1942	2324	498	2282	2341	382
vC1, stage 1 conf vol							981	981		1343	1343	
vC2, stage 2 conf vol							961	1344		939	998	
vCu, unblocked vol	764			995			1942	2324	498	2282	2341	382
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			57			100	100	11	100	100	100
cM capacity (veh/h)	858			673			129	115	510	2	33	622

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	1	641	354	290	509	256	0	456	0	0
Volume Left	1	0	0	290	0	0	0	0	0	0
Volume Right	0	0	34	0	0	1	0	456	0	0
cSH	858	1700	1700	673	1700	1700	1700	510	1700	1700
Volume to Capacity	0.00	0.38	0.21	0.43	0.30	0.15	0.00	0.89	0.00	0.00
Queue Length 95th (ft)	0	0	0	54	0	0	0	253	0	0
Control Delay (s)	9.2	0.0	0.0	14.3	0.0	0.0	0.0	46.5	0.0	0.0
Lane LOS	A			B			A	E	A	A
Approach Delay (s)	0.0			3.9			46.5		0.0	
Approach LOS							E		A	

Intersection Summary			
Average Delay	10.1		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

6: SR 46 East & Airport road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	611	500	744	22	5	173
Peak Hour Factor	0.95	0.95	0.84	0.84	0.79	0.79
Hourly flow rate (vph)	643	526	886	26	6	219
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	912				2448	456
vC1, stage 1 conf vol					899	
vC2, stage 2 conf vol					1549	
vCu, unblocked vol	912				2448	456
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	11				65	60
cM capacity (veh/h)	724				18	543

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	643	263	263	590	321	6	219
Volume Left	643	0	0	0	0	6	0
Volume Right	0	0	0	0	26	0	219
cSH	724	1700	1700	1700	1700	18	543
Volume to Capacity	0.89	0.15	0.15	0.35	0.19	0.35	0.40
Queue Length 95th (ft)	282	0	0	0	0	24	48
Control Delay (s)	35.9	0.0	0.0	0.0	0.0	290.6	16.0
Lane LOS	E					F	C
Approach Delay (s)	19.8			0.0		23.7	
Approach LOS						C	

Intersection Summary			
Average Delay	12.3		
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek Road & Airport road

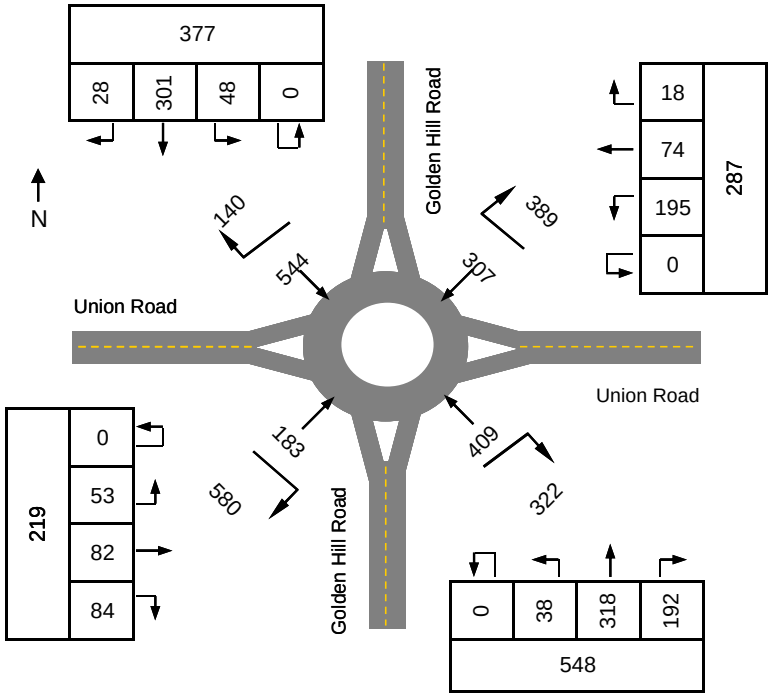
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	0	17	0	11	0	513	113	6	101	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.75	0.75	0.75	0.75	0.81	0.81	0.81
Hourly flow rate (vph)	0	0	0	23	0	15	0	684	151	7	125	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					3							
Upstream signal (ft)								208				
pX, platoon unblocked												
vC, conflicting volume	914	974	125	899	899	759	125			835		
vC1, stage 1 conf vol				759	759							
vC2, stage 2 conf vol				140	140							
vCu, unblocked vol	914	974	125	899	899	759	125			835		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)				6.3	5.7							
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	100	100	100	94	100	96	100			99		
cM capacity (veh/h)	224	231	877	367	384	377	1352			723		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	37	835	132
Volume Left	0	23	0	7
Volume Right	0	15	151	0
cSH	1700	371	1352	723
Volume to Capacity	0.00	0.10	0.00	0.01
Queue Length 95th (ft)	0	8	0	1
Control Delay (s)	0.0	15.8	0.0	0.7
Lane LOS	A	C		A
Approach Delay (s)	0.0	15.8	0.0	0.7
Approach LOS	A	C		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.92	Time	AM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	548	183	1092	0.55	12	B	75
South	377	307	985	0.42	11	B	50
East	219	544	809	0.29	11	B	25
West	287	409	905	0.34	11	B	50
All	1431				12	B	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***

**** Assumes a queued vehicle length of 25 feet***

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		4940	1504	2918	3343						1399	1404
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		4940	1504	2918	3343						1399	1404
Volume (vph)	0	561	266	693	798	0	0	0	0	164	0	100
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	1.00	1.00	1.00	0.88	0.88	0.88
Adj. Flow (vph)	0	603	286	722	831	0	0	0	0	186	0	114
RTOR Reduction (vph)	0	0	205	0	0	0	0	0	0	0	0	93
Lane Group Flow (vph)	0	603	81	722	831	0	0	0	0	0	186	21
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	5%	5%	20%	8%	0%	0%	0%	0%	29%	0%	15%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.3	26.3	38.0	68.4						17.2	17.2
Effective Green, g (s)		26.9	26.9	38.8	69.7						17.3	17.3
Actuated g/C Ratio		0.28	0.28	0.41	0.73						0.18	0.18
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1399	426	1192	2453						255	256
v/s Ratio Prot		c0.12		c0.25	0.25							
v/s Ratio Perm			0.05								0.13	0.01
v/c Ratio		0.43	0.19	0.61	0.34						0.73	0.08
Uniform Delay, d1		27.8	25.8	22.1	4.5						36.6	32.3
Progression Factor		1.00	1.00	1.33	0.54						1.00	1.00
Incremental Delay, d2		1.0	1.0	0.8	0.3						10.0	0.1
Delay (s)		28.8	26.8	30.1	2.7						46.6	32.4
Level of Service		C	C	C	A						D	C
Approach Delay (s)		28.1			15.4			0.0			41.2	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.86	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1504	3282			5641		1570	1430			1644	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1504	3282			5641		1570	1430			1644	
Volume (vph)	179	546	0	0	1124	124	364	1	477	0	0	2
Peak-hour factor, PHF	0.93	0.93	0.93	0.97	0.97	0.97	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	192	587	0	0	1159	128	409	1	536	0	0	3
RTOR Reduction (vph)	0	0	0	0	0	0	0	253	0	0	0	0
Lane Group Flow (vph)	192	587	0	0	1287	0	409	284	0	0	3	0
Confl. Peds. (#/hr)	10		10	10		10						
Heavy Vehicles (%)	20%	10%	0%	0%	12%	30%	15%	0%	13%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	12.0	55.8			38.7		24.0	24.0			1.0	
Effective Green, g (s)	12.0	56.9			40.9		25.1	25.1			1.0	
Actuated g/C Ratio	0.13	0.60			0.43		0.26	0.26			0.01	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	190	1966			2429		415	378			17	
v/s Ratio Prot	c0.13	0.18			c0.23		c0.26	0.20			c0.00	
v/s Ratio Perm												
v/c Ratio	1.01	0.30			0.53		0.99	0.75			0.18	
Uniform Delay, d1	41.5	9.3			20.0		34.8	32.1			46.6	
Progression Factor	1.53	0.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	65.3	0.3			0.8		40.2	9.2			1.8	
Delay (s)	128.9	0.4			20.8		75.0	41.2			48.4	
Level of Service	F	A			C		E	D			D	
Approach Delay (s)		32.1			20.8			55.8			48.4	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3139	1472	3335	3034	1476	3335	3288		3335	1810	1508
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3139	1472	3335	3034	1476	3335	3288		3335	1810	1508
Volume (vph)	56	608	202	58	996	57	193	62	22	80	98	87
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.98	0.98	0.98	0.87	0.87	0.87
Adj. Flow (vph)	60	654	217	69	1186	68	197	63	22	92	113	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	60	654	217	69	1186	68	197	85	0	92	113	100
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		custom
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2			6						7
Actuated Green, G (s)	2.6	34.9	34.9	3.9	36.2	36.2	13.3	15.2		9.7	11.6	13.3
Effective Green, g (s)	2.1	38.2	38.2	3.4	39.5	39.5	14.2	16.1		10.6	12.5	14.2
Actuated g/C Ratio	0.02	0.45	0.45	0.04	0.47	0.47	0.17	0.19		0.13	0.15	0.17
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	83	1422	667	135	1422	692	562	628		419	268	254
v/s Ratio Prot	0.02	0.21		c0.02	c0.39		0.06	c0.03		0.03	c0.06	
v/s Ratio Perm			0.15			0.05						c0.07
v/c Ratio	0.72	0.46	0.33	0.51	0.83	0.10	0.35	0.14		0.22	0.42	0.39
Uniform Delay, d1	40.8	15.9	14.8	39.6	19.5	12.5	31.0	28.3		33.1	32.6	31.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	22.9	1.1	1.3	1.4	5.9	0.3	0.4	0.1		0.3	1.3	1.2
Delay (s)	63.7	17.0	16.1	41.0	25.4	12.8	31.4	28.4		33.4	33.9	32.4
Level of Service	E	B	B	D	C	B	C	C		C	C	C
Approach Delay (s)		19.8			25.6			30.5			33.3	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	84.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	674	40	307	1134	0	0	0	218	0	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.75	0.75	0.75	1.00	1.00	1.00
Hourly flow rate (vph)	1	812	48	349	1289	0	0	0	291	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1289			860			2181	2825	430	2685	2849	644
vC1, stage 1 conf vol							839	839		1986	1986	
vC2, stage 2 conf vol							1342	1986		699	863	
vCu, unblocked vol	1289			860			2181	2825	430	2685	2849	644
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			54			100	100	49	100	100	100
cM capacity (veh/h)	545			758			79	55	565	3	23	420

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	1	541	319	349	859	430	291	0	0
Volume Left	1	0	0	349	0	0	0	0	0
Volume Right	0	0	48	0	0	0	291	0	0
cSH	545	1700	1700	758	1700	1700	565	1700	1700
Volume to Capacity	0.00	0.32	0.19	0.46	0.51	0.25	0.51	0.00	0.00
Queue Length 95th (ft)	0	0	0	61	0	0	73	0	0
Control Delay (s)	11.6	0.0	0.0	13.7	0.0	0.0	17.9	0.0	0.0
Lane LOS	B			B			C	A	A
Approach Delay (s)	0.0			2.9			17.9	0.0	
Approach LOS							C	A	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

6: SR 46 East & Airport Rd

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	166	726	786	19	5	655
Peak Hour Factor	0.95	0.95	0.91	0.91	0.77	0.77
Hourly flow rate (vph)	175	764	864	21	6	851
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	885				1606	442
vC1, stage 1 conf vol					874	
vC2, stage 2 conf vol					732	
vCu, unblocked vol	885				1606	442
tC, single (s)	4.2				6.8	7.0
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	76				97	0
cM capacity (veh/h)	742				255	555

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	175	382	382	576	309	6	851
Volume Left	175	0	0	0	0	6	0
Volume Right	0	0	0	0	21	0	851
cSH	742	1700	1700	1700	1700	255	555
Volume to Capacity	0.24	0.22	0.22	0.34	0.18	0.03	1.53
Queue Length 95th (ft)	23	0	0	0	0	2	1105
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	19.5	269.0
Lane LOS	B					C	F
Approach Delay (s)	2.1			0.0		267.1	
Approach LOS						F	

Intersection Summary			
Average Delay	86.1		
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek Rd & Airport Rd

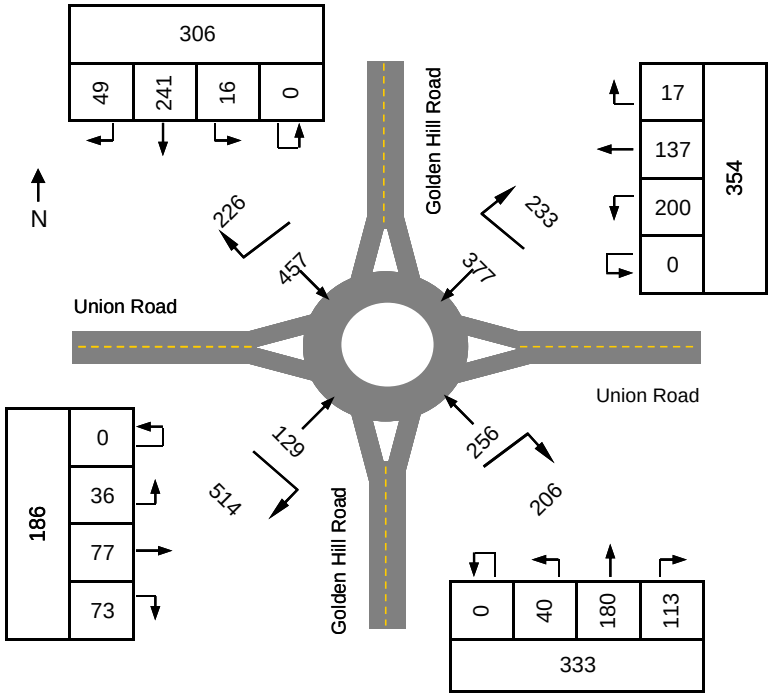
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	3	142	120	0	5	0	114	22	7	404	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.75	0.90	0.90	0.90	0.77	0.77	0.77
Hourly flow rate (vph)	3	3	154	160	0	7	0	127	24	9	525	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					3							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	688	694	525	838	682	139	525			151		
vC1, stage 1 conf vol				139	139							
vC2, stage 2 conf vol				699	543							
vCu, unblocked vol	688	694	525	838	682	139	525			151		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)				6.3	5.7							
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	99	99	70	42	100	99	100			99		
cM capacity (veh/h)	332	341	517	275	480	861	952			1322		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	7	154	167	151	534
Volume Left	3	0	160	0	9
Volume Right	0	154	7	24	0
cSH	336	517	283	952	1322
Volume to Capacity	0.02	0.30	0.59	0.00	0.01
Queue Length 95th (ft)	1	31	87	0	1
Control Delay (s)	15.9	14.9	34.5	0.0	0.2
Lane LOS	C	B	D		A
Approach Delay (s)	14.9		34.5	0.0	0.2
Approach LOS	B		D		

Intersection Summary			
Average Delay	8.2		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.95	Time	PM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	333	129	1143	0.31	10	A	25
South	306	377	929	0.35	11	B	50
East	186	457	870	0.23	10	B	25
West	354	256	1028	0.36	10	B	50
All	1179				10	B	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***

**** Assumes a queued vehicle length of 25 feet***

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1429	3099	3406						1367	1223
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1429	3099	3406						1367	1223
Volume (vph)	0	580	330	1040	570	0	0	0	0	200	0	80
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	630	359	1130	620	0	0	0	0	217	0	87
RTOR Reduction (vph)	0	0	146	0	0	0	0	0	0	0	0	70
Lane Group Flow (vph)	0	630	213	1130	620	0	0	0	0	0	217	17
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	0%	5%	13%	13%	6%	0%	0%	0%	0%	32%	0%	32%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		36.8	36.8	46.2	87.1						23.5	23.5
Effective Green, g (s)		37.4	37.4	47.0	88.4						23.6	23.6
Actuated g/C Ratio		0.31	0.31	0.39	0.74						0.20	0.20
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1072	445	1214	2509						269	241
v/s Ratio Prot		c0.18		c0.36	0.18							
v/s Ratio Perm			0.15								0.16	0.01
v/c Ratio		0.59	0.48	0.93	0.25						0.81	0.07
Uniform Delay, d1		34.8	33.4	34.9	5.1						46.0	39.3
Progression Factor		1.00	1.00	0.27	0.94						1.00	1.00
Incremental Delay, d2		2.4	3.7	8.7	0.2						16.0	0.1
Delay (s)		37.2	37.1	18.3	5.0						62.1	39.4
Level of Service		D	D	B	A						E	D
Approach Delay (s)		37.1			13.6			0.0			55.6	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1399	3374			5837		1570	1410			1729	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (perm)	1399	3374			5837		1570	1410			1729	
Volume (vph)	80	700	0	0	1420	150	180	10	810	10	0	10
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	737	0	0	1495	158	189	11	853	11	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	85	0	0	0	0
Lane Group Flow (vph)	84	737	0	0	1653	0	189	779	0	0	22	0
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	29%	7%	0%	0%	8%	29%	15%	0%	15%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	10.2	53.1			37.8		50.9	50.9			1.8	
Effective Green, g (s)	10.2	54.2			40.0		52.0	52.0			1.8	
Actuated g/C Ratio	0.08	0.45			0.33		0.43	0.43			0.02	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	119	1524			1946		680	611			26	
v/s Ratio Prot	c0.06	0.22			c0.28		0.12	c0.55			c0.01	
v/s Ratio Perm												
v/c Ratio	0.71	0.48			0.85		0.28	1.27			0.85	
Uniform Delay, d1	53.4	23.1			37.2		21.9	34.0			59.0	
Progression Factor	0.36	1.24			1.00		1.00	1.00			1.00	
Incremental Delay, d2	14.5	0.8			4.9		0.4	136.1			106.7	
Delay (s)	33.7	29.4			42.1		22.3	170.1			165.7	
Level of Service	C	C			D		C	F			F	
Approach Delay (s)		29.9			42.1			143.6			165.7	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	70.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3223	1498	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3223	1498	1719	1538
Volume (vph)	280	1240	1280	230	210	290
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	1348	1391	250	228	315
RTOR Reduction (vph)	0	0	0	124	0	256
Lane Group Flow (vph)	304	1348	1391	126	228	59
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	12%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	24.3	115.7	55.0	55.0	20.7	20.7
Effective Green, g (s)	23.8	115.7	58.3	58.3	21.6	21.6
Actuated g/C Ratio	0.21	1.00	0.50	0.50	0.19	0.19
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	354	3223	1624	755	321	287
v/s Ratio Prot	c0.18	0.42	c0.43		c0.13	
v/s Ratio Perm				0.08		0.04
v/c Ratio	0.86	0.42	0.86	0.17	0.71	0.20
Uniform Delay, d1	44.3	0.0	25.0	15.5	44.1	39.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.6	0.1	4.8	0.1	7.5	0.4
Delay (s)	63.0	0.1	29.9	15.7	51.6	40.2
Level of Service	E	A	C	B	D	D
Approach Delay (s)		11.7	27.7		45.0	
Approach LOS		B	C		D	

Intersection Summary			
HCM Average Control Delay	23.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	115.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3112	1482	3335	3167	1485	3335	3388		3335	1810	1511
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3112	1482	3335	3167	1485	3335	3388		3335	1810	1511
Volume (vph)	350	890	210	50	1080	230	280	320	30	130	160	150
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	368	937	221	53	1137	242	295	337	32	137	168	158
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	368	937	221	53	1137	242	295	369	0	137	168	158
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	16.5	58.9	58.9	4.6	47.0	47.0	15.4	28.1		8.7	21.4	21.4
Effective Green, g (s)	16.0	62.2	62.2	4.1	50.3	50.3	16.3	29.0		9.6	22.3	22.3
Actuated g/C Ratio	0.13	0.51	0.51	0.03	0.42	0.42	0.13	0.24		0.08	0.18	0.18
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	441	1601	762	113	1318	618	450	813		265	334	279
v/s Ratio Prot	c0.11	0.30		0.02	c0.36		c0.09	0.11		0.04	0.09	
v/s Ratio Perm			0.15			0.16						c0.10
v/c Ratio	0.83	0.59	0.29	0.47	0.86	0.39	0.66	0.45		0.52	0.50	0.57
Uniform Delay, d1	51.2	20.4	16.7	57.3	32.2	24.6	49.6	39.2		53.4	44.3	44.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.3	0.6	0.2	1.1	6.1	0.4	3.6	0.5		2.0	1.4	2.9
Delay (s)	63.4	20.9	17.0	58.5	38.2	25.0	53.2	39.7		55.4	45.7	47.8
Level of Service	E	C	B	E	D	C	D	D		E	D	D
Approach Delay (s)		30.6			36.7			45.7			49.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	37.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	890	150	400	1210	10	220	10	400	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	937	158	421	1274	11	232	11	421	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1284			1095			2516	3163	547	3037	3237	642
vC1, stage 1 conf vol							1037	1037		2121	2121	
vC2, stage 2 conf vol							1479	2126		916	1116	
vCu, unblocked vol	1284			1095			2516	3163	547	3037	3237	642
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			32			0	41	11	100	100	100
cM capacity (veh/h)	547			616			29	18	473	0	3	422

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	11	625	470	421	849	435	242	421	0	0
Volume Left	11	0	0	421	0	0	232	0	0	0
Volume Right	0	0	158	0	0	11	0	421	0	0
cSH	547	1700	1700	616	1700	1700	28	473	1700	1700
Volume to Capacity	0.02	0.37	0.28	0.68	0.50	0.26	8.56	0.89	0.00	0.00
Queue Length 95th (ft)	1	0	0	133	0	0	Err	243	0	0
Control Delay (s)	11.7	0.0	0.0	22.5	0.0	0.0	Err	48.4	0.0	0.0
Lane LOS	B			C			F	E	A	A
Approach Delay (s)	0.1			5.6			3681.1		0.0	
Approach LOS							F		A	

Intersection Summary			
Average Delay	705.5		
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	480	810	1340	30	10	210
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	505	853	1411	32	11	221
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1442				2847	705
vC1, stage 1 conf vol					1411	
vC2, stage 2 conf vol					1437	
vCu, unblocked vol	1442				2847	705
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	0				0	41
cM capacity (veh/h)	451				0	372

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	505	426	426	705	705	32	232
Volume Left	505	0	0	0	0	0	11
Volume Right	0	0	0	0	0	32	221
cSH	451	1700	1700	1700	1700	1700	0
Volume to Capacity	1.12	0.25	0.25	0.41	0.41	0.02	Err
Queue Length 95th (ft)	438	0	0	0	0	0	Err
Control Delay (s)	108.7	0.0	0.0	0.0	0.0	0.0	Err
Lane LOS	F						F
Approach Delay (s)	40.4			0.0			Err
Approach LOS							F

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

7: SR 46 East & Jardine Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	140	690	0	0	980	40	0	0	0	30	0	340
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	147	726	0	0	1032	42	0	0	0	32	0	358
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1074			726			1895	2095	363	1689	2053	516
vC1, stage 1 conf vol							1021	1021		1032	1032	
vC2, stage 2 conf vol							874	1074		658	1021	
vCu, unblocked vol	1074			726			1895	2095	363	1689	2053	516
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.6	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.6	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	77			100			100	100	100	84	100	28
cM capacity (veh/h)	628			886			10	130	639	193	190	496

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	147	363	363	0	516	516	42	0	0	32	358
Volume Left	147	0	0	0	0	0	0	0	0	32	0
Volume Right	0	0	0	0	0	0	42	0	0	0	358
cSH	628	1700	1700	1700	1700	1700	1700	1700	1700	193	496
Volume to Capacity	0.23	0.21	0.21	0.00	0.30	0.30	0.02	0.00	0.00	0.16	0.72
Queue Length 95th (ft)	23	0	0	0	0	0	0	0	0	14	145
Control Delay (s)	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	28.8
Lane LOS	B							A	A	D	D
Approach Delay (s)	2.1			0.0				0.0		28.7	
Approach LOS								A		D	

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek Rd & Airport

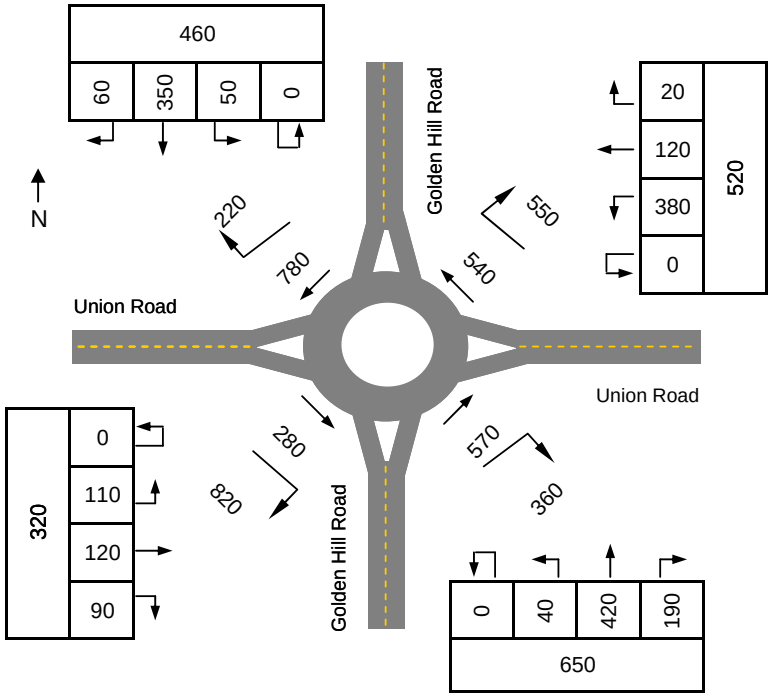
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	60	10	230	280	10	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	11	250	304	11	120
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	543	402			554	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	543	402			554	
tC, single (s)	6.6	6.4			4.3	
tC, 2 stage (s)						
tF (s)	3.7	3.5			2.4	
p0 queue free %	86	98			99	
cM capacity (veh/h)	464	609			927	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	76	554	130
Volume Left	65	0	11
Volume Right	11	304	0
cSH	480	1700	927
Volume to Capacity	0.16	0.33	0.01
Queue Length 95th (ft)	14	0	1
Control Delay (s)	13.9	0.0	0.8
Lane LOS	B		A
Approach Delay (s)	13.9	0.0	0.8
Approach LOS	B		

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.92	Time	AM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	650	280	1008	0.70	16	C	150
South	460	540	812	0.62	16	C	100
East	320	780	665	0.52	16	C	75
West	520	570	791	0.71	20	C	150
All	1950				17	C	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000*

*** Assumes a queued vehicle length of 25 feet*

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1503	2918	3343						1415	1404
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1503	2918	3343						1415	1404
Volume (vph)	0	880	270	1130	830	0	0	0	0	310	10	240
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	926	284	1189	874	0	0	0	0	326	11	253
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	163
Lane Group Flow (vph)	0	926	197	1189	874	0	0	0	0	0	337	90
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	5%	5%	20%	8%	0%	0%	0%	0%	29%	0%	15%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.4	31.4	47.2	82.7						27.9	27.9
Effective Green, g (s)		32.0	32.0	48.0	84.0						28.0	28.0
Actuated g/C Ratio		0.27	0.27	0.40	0.70						0.23	0.23
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		917	401	1167	2340						330	328
v/s Ratio Prot		c0.27		c0.41	0.26							
v/s Ratio Perm			0.13								0.24	0.06
v/c Ratio		1.01	0.49	1.02	0.37						1.02	0.27
Uniform Delay, d1		44.0	37.1	36.0	7.3						46.0	37.7
Progression Factor		1.00	1.00	0.22	1.41						1.00	1.00
Incremental Delay, d2		32.2	4.2	17.6	0.2						55.1	0.5
Delay (s)		76.2	41.4	25.5	10.5						101.1	38.1
Level of Service		E	D	C	B						F	D
Approach Delay (s)		68.0			19.2			0.0			74.1	
Approach LOS		E			B			A			E	

Intersection Summary			
HCM Average Control Delay	42.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1504	3282			5653		1570	1436			1729	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (perm)	1504	3282			5653		1570	1436			1729	
Volume (vph)	310	880	0	0	1580	160	370	10	620	10	0	10
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	326	926	0	0	1663	168	389	11	653	11	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	82	0	0	0	0
Lane Group Flow (vph)	326	926	0	0	1831	0	389	582	0	0	22	0
Confl. Peds. (#/hr)	10		10	10		10						
Heavy Vehicles (%)	20%	10%	0%	0%	12%	30%	15%	0%	13%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	23.0	63.1			35.0		40.9	40.9			1.8	
Effective Green, g (s)	23.0	64.2			37.2		42.0	42.0			1.8	
Actuated g/C Ratio	0.19	0.54			0.31		0.35	0.35			0.02	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	288	1756			1752		550	503			26	
v/s Ratio Prot	c0.22	0.28			c0.32		0.25	c0.41			c0.01	
v/s Ratio Perm												
v/c Ratio	1.13	0.53			1.05		0.71	1.16			0.85	
Uniform Delay, d1	48.5	18.1			41.4		33.7	39.0			59.0	
Progression Factor	0.82	0.59			1.00		1.00	1.00			1.00	
Incremental Delay, d2	63.9	0.1			34.4		4.7	91.2			106.7	
Delay (s)	103.7	10.8			75.8		38.4	130.2			165.7	
Level of Service	F	B			E		D	F			F	
Approach Delay (s)		35.0			75.8			96.3			165.7	
Approach LOS		C			E			F			F	

Intersection Summary			
HCM Average Control Delay	69.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3112	1497	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3112	1497	1719	1538
Volume (vph)	300	1210	1540	110	110	200
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	316	1274	1621	116	116	211
RTOR Reduction (vph)	0	0	0	49	0	187
Lane Group Flow (vph)	316	1274	1621	67	116	24
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	16%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	25.9	121.9	67.1	67.1	13.2	13.2
Effective Green, g (s)	25.4	121.9	70.4	70.4	14.1	14.1
Actuated g/C Ratio	0.21	1.00	0.58	0.58	0.12	0.12
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	358	3223	1797	865	199	178
v/s Ratio Prot	c0.18	0.40	c0.52		c0.07	
v/s Ratio Perm				0.04		0.02
v/c Ratio	0.88	0.40	0.90	0.08	0.58	0.14
Uniform Delay, d1	46.8	0.0	22.7	11.4	51.1	48.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.1	0.1	6.9	0.0	4.6	0.4
Delay (s)	68.9	0.1	29.6	11.4	55.7	48.9
Level of Service	E	A	C	B	E	D
Approach Delay (s)		13.8	28.4		51.3	
Approach LOS		B	C		D	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	121.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3139	1455	3335	3034	1461	3335	3380		3335	1810	1502
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3139	1455	3335	3034	1461	3335	3380		3335	1810	1502
Volume (vph)	200	920	200	60	1240	170	200	280	30	220	350	210
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	211	968	211	63	1305	179	211	295	32	232	368	221
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	211	968	211	63	1305	179	211	327	0	232	368	221
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	10.6	58.7	58.7	4.9	53.0	53.0	11.4	29.6		10.2	28.4	28.4
Effective Green, g (s)	10.1	62.0	62.0	4.4	56.3	56.3	12.3	30.5		11.1	29.3	29.3
Actuated g/C Ratio	0.08	0.50	0.50	0.04	0.45	0.45	0.10	0.25		0.09	0.24	0.24
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	272	1570	728	118	1378	663	331	831		299	428	355
v/s Ratio Prot	c0.06	0.31		0.02	c0.43		0.06	0.10		c0.07	c0.20	
v/s Ratio Perm			0.14			0.12						0.15
v/c Ratio	0.78	0.62	0.29	0.53	0.95	0.27	0.64	0.39		0.78	0.86	0.62
Uniform Delay, d1	55.8	22.4	18.1	58.8	32.4	21.1	53.7	39.0		55.2	45.4	42.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.9	0.7	0.2	2.3	13.5	0.2	4.2	0.4		12.2	16.0	3.5
Delay (s)	67.7	23.1	18.3	61.1	45.9	21.3	57.9	39.4		67.5	61.4	45.9
Level of Service	E	C	B	E	D	C	E	D		E	E	D
Approach Delay (s)		29.2			43.7			46.6			59.0	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	890	270	670	1350	10	190	10	500	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	937	284	705	1421	11	200	11	526	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1432			1221			3221	3942	611	3858	4079	716
vC1, stage 1 conf vol							1100	1100		2837	2837	
vC2, stage 2 conf vol							2121	2842		1021	1242	
vCu, unblocked vol	1432			1221			3221	3942	611	3858	4079	716
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			0			0	0	0	0	0	100
cM capacity (veh/h)	481			550			0	0	430	0	0	377

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	11	625	596	705	947	484	211	526	0	0
Volume Left	11	0	0	705	0	0	200	0	0	0
Volume Right	0	0	284	0	0	11	0	526	0	0
cSH	481	1700	1700	550	1700	1700	0	430	1700	1700
Volume to Capacity	0.02	0.37	0.35	1.28	0.56	0.28	Err	1.22	0.00	0.00
Queue Length 95th (ft)	2	0	0	715	0	0	Err	533	0	0
Control Delay (s)	12.7	0.0	0.0	163.1	0.0	0.0	Err	148.6	0.0	0.0
Lane LOS	B			F			F	F	A	A
Approach Delay (s)	0.1			53.8			Err		0.0	
Approach LOS							F		A	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	310	1080	1440	20	10	520
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	326	1137	1516	21	11	547
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1537				2737	758
vC1, stage 1 conf vol					1516	
vC2, stage 2 conf vol					1221	
vCu, unblocked vol	1537				2737	758
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	21				77	0
cM capacity (veh/h)	414				46	343

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	326	568	568	758	758	21	558
Volume Left	326	0	0	0	0	0	11
Volume Right	0	0	0	0	0	21	547
cSH	414	1700	1700	1700	1700	1700	306
Volume to Capacity	0.79	0.33	0.33	0.45	0.45	0.01	1.82
Queue Length 95th (ft)	171	0	0	0	0	0	928
Control Delay (s)	39.1	0.0	0.0	0.0	0.0	0.0	411.9
Lane LOS	E						F
Approach Delay (s)	8.7			0.0			411.9
Approach LOS							F

Intersection Summary			
Average Delay	68.2		
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

7: SR 46 East & Jardine Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	240	820	0	0	1300	30	0	0	0	40	0	170
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	253	863	0	0	1368	32	0	0	0	42	0	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1400			863			2232	2768	432	2305	2737	684
vC1, stage 1 conf vol							1368	1368		1368	1368	
vC2, stage 2 conf vol							863	1400		937	1368	
vCu, unblocked vol	1400			863			2232	2768	432	2305	2737	684
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.6	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.6	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	46			100			100	100	100	55	100	53
cM capacity (veh/h)	469			788			7	9	578	94	87	384

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	253	432	432	0	684	684	32	0	0	42	179
Volume Left	253	0	0	0	0	0	0	0	0	42	0
Volume Right	0	0	0	0	0	0	32	0	0	0	179
cSH	469	1700	1700	1700	1700	1700	1700	1700	1700	94	384
Volume to Capacity	0.54	0.25	0.25	0.00	0.40	0.40	0.02	0.00	0.00	0.45	0.47
Queue Length 95th (ft)	79	0	0	0	0	0	0	0	0	47	60
Control Delay (s)	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.6	22.3
Lane LOS	C							A	A	F	C
Approach Delay (s)	4.8			0.0				0.0		31.7	
Approach LOS								A		D	

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek & Airport

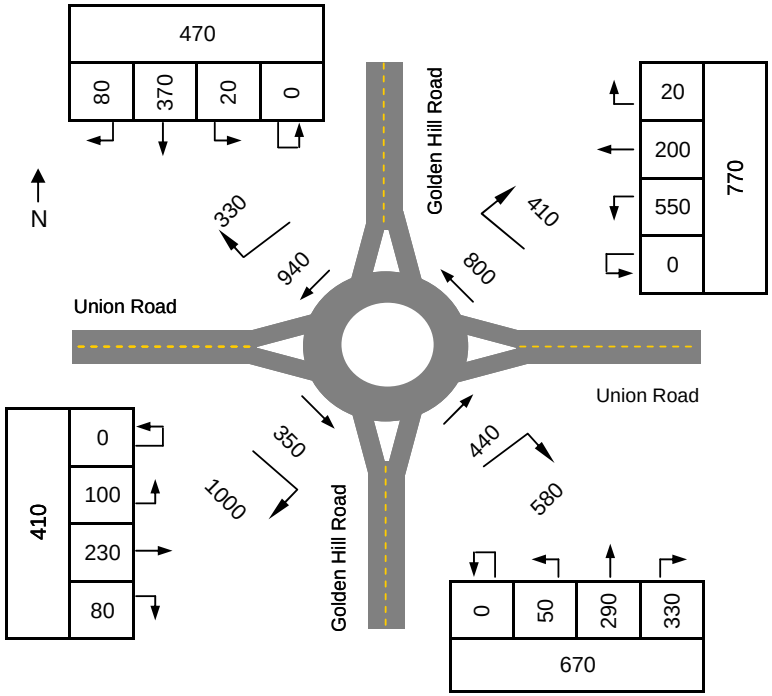
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	280	10	130	100	10	260
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	304	11	141	109	11	283
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	500	196			250	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	500	196			250	
tC, single (s)	6.6	6.4			4.3	
tC, 2 stage (s)						
tF (s)	3.7	3.5			2.4	
p0 queue free %	38	99			99	
cM capacity (veh/h)	494	800			1212	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	315	250	293
Volume Left	304	0	11
Volume Right	11	109	0
cSH	500	1700	1212
Volume to Capacity	0.63	0.15	0.01
Queue Length 95th (ft)	108	0	1
Control Delay (s)	23.7	0.0	0.4
Lane LOS	C		A
Approach Delay (s)	23.7	0.0	0.4
Approach LOS	C		

Intersection Summary			
Average Delay	8.8		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.95	Time	PM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	670	350	951	0.74	19	C	175
South	470	800	654	0.76	26	D	175
East	410	940	582	0.74	27	D	150
West	770	440	882	0.92	36	E	350
All	2320				27	D	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000*

*** Assumes a queued vehicle length of 25 feet*

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1429	3099	3406						1367	1223
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1429	3099	3406						1367	1223
Volume (vph)	0	642	330	1040	570	0	0	0	0	222	0	80
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	698	359	1130	620	0	0	0	0	241	0	87
RTOR Reduction (vph)	0	0	134	0	0	0	0	0	0	0	0	69
Lane Group Flow (vph)	0	698	225	1130	620	0	0	0	0	0	241	18
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	0%	5%	13%	13%	6%	0%	0%	0%	0%	32%	0%	32%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		35.3	35.3	46.2	85.6						25.0	25.0
Effective Green, g (s)		35.9	35.9	47.0	86.9						25.1	25.1
Actuated g/C Ratio		0.30	0.30	0.39	0.72						0.21	0.21
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1029	428	1214	2467						286	256
v/s Ratio Prot		c0.20		c0.36	0.18							
v/s Ratio Perm			0.16								0.18	0.01
v/c Ratio		0.68	0.53	0.93	0.25						0.84	0.07
Uniform Delay, d1		37.0	35.0	34.9	5.6						45.6	38.1
Progression Factor		1.00	1.00	0.27	0.93						1.00	1.00
Incremental Delay, d2		3.6	4.6	8.7	0.2						19.6	0.1
Delay (s)		40.6	39.5	18.3	5.4						65.2	38.2
Level of Service		D	D	B	A						E	D
Approach Delay (s)		40.2			13.7			0.0			58.0	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1399	3374			5837		1570	1409			1729	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (perm)	1399	3374			5837		1570	1409			1729	
Volume (vph)	80	784	0	0	1420	150	180	10	928	10	0	10
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	825	0	0	1495	158	189	11	977	11	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	70	0	0	0	0
Lane Group Flow (vph)	84	825	0	0	1653	0	189	918	0	0	22	0
Confl. Peds. (#/hr)	10					10						
Heavy Vehicles (%)	29%	7%	0%	0%	8%	29%	15%	0%	15%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	10.2	53.1			37.8		50.9	50.9			1.8	
Effective Green, g (s)	10.2	54.2			40.0		52.0	52.0			1.8	
Actuated g/C Ratio	0.08	0.45			0.33		0.43	0.43			0.02	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	119	1524			1946		680	611			26	
v/s Ratio Prot	c0.06	0.24			c0.28		0.12	c0.65			c0.01	
v/s Ratio Perm												
v/c Ratio	0.71	0.54			0.85		0.28	1.50			0.85	
Uniform Delay, d1	53.4	23.9			37.2		21.9	34.0			59.0	
Progression Factor	0.33	1.19			1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.9	0.9			4.9		0.4	234.8			106.7	
Delay (s)	30.5	29.4			42.1		22.3	268.8			165.7	
Level of Service	C	C			D		C	F			F	
Approach Delay (s)		29.5			42.1			229.2			165.7	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	98.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3223	1498	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3223	1498	1719	1538
Volume (vph)	280	1442	1280	230	223	290
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	1567	1391	250	242	315
RTOR Reduction (vph)	0	0	0	125	0	254
Lane Group Flow (vph)	304	1567	1391	125	242	61
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	12%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	24.4	117.2	55.3	55.3	21.8	21.8
Effective Green, g (s)	23.9	117.2	58.6	58.6	22.7	22.7
Actuated g/C Ratio	0.20	1.00	0.50	0.50	0.19	0.19
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	351	3223	1612	749	333	298
v/s Ratio Prot	c0.18	0.49	c0.43		c0.14	
v/s Ratio Perm				0.08		0.04
v/c Ratio	0.87	0.49	0.86	0.17	0.73	0.20
Uniform Delay, d1	45.1	0.0	25.8	16.0	44.3	39.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	19.9	0.1	5.2	0.1	7.9	0.4
Delay (s)	65.0	0.1	30.9	16.1	52.3	40.1
Level of Service	E	A	C	B	D	D
Approach Delay (s)		10.7	28.7		45.4	
Approach LOS		B	C		D	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	117.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3112	1482	3335	3167	1485	3335	3376		3335	1810	1511
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3112	1482	3335	3167	1485	3335	3376		3335	1810	1511
Volume (vph)	350	1104	210	50	1080	230	280	320	39	136	160	150
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	368	1162	221	53	1137	242	295	337	41	143	168	158
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	368	1162	221	53	1137	242	295	378	0	143	168	158
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	16.5	58.9	58.9	4.6	47.0	47.0	15.4	27.9		8.9	21.4	21.4
Effective Green, g (s)	16.0	62.2	62.2	4.1	50.3	50.3	16.3	28.8		9.8	22.3	22.3
Actuated g/C Ratio	0.13	0.51	0.51	0.03	0.42	0.42	0.13	0.24		0.08	0.18	0.18
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	441	1601	762	113	1318	618	450	804		270	334	279
v/s Ratio Prot	c0.11	0.37		0.02	c0.36		c0.09	0.11		0.04	0.09	
v/s Ratio Perm			0.15			0.16						c0.10
v/c Ratio	0.83	0.73	0.29	0.47	0.86	0.39	0.66	0.47		0.53	0.50	0.57
Uniform Delay, d1	51.2	22.7	16.7	57.3	32.2	24.6	49.6	39.5		53.3	44.3	44.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.3	1.7	0.2	1.1	6.1	0.4	3.6	0.5		2.1	1.4	2.9
Delay (s)	63.4	24.4	17.0	58.5	38.2	25.0	53.2	40.0		55.5	45.7	47.8
Level of Service	E	C	B	E	D	C	D	D		E	D	D
Approach Delay (s)		31.7			36.7			45.8			49.4	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	1119	150	400	1210	10	220	10	478	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	1178	158	421	1274	11	232	11	503	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1284			1336			2757	3404	668	3239	3478	642
vC1, stage 1 conf vol							1278	1278		2121	2121	
vC2, stage 2 conf vol							1479	2126		1118	1357	
vCu, unblocked vol	1284			1336			2757	3404	668	3239	3478	642
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			15			0	0	0	0	100	100
cM capacity (veh/h)	547			497			9	3	394	0	1	422

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	11	785	551	421	849	435	242	503	0	0
Volume Left	11	0	0	421	0	0	232	0	0	0
Volume Right	0	0	158	0	0	11	0	503	0	0
cSH	547	1700	1700	497	1700	1700	8	394	1700	1700
Volume to Capacity	0.02	0.46	0.32	0.85	0.50	0.26	29.70	1.28	0.00	0.00
Queue Length 95th (ft)	1	0	0	217	0	0	Err	555	0	0
Control Delay (s)	11.7	0.0	0.0	40.8	0.0	0.0	Err	172.4	0.0	0.0
Lane LOS	B			E			F	F	A	A
Approach Delay (s)	0.1			10.1			3364.6		0.0	
Approach LOS							F		A	

Intersection Summary			
Average Delay	665.0		
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	787	810	1340	30	10	210
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	828	853	1411	32	11	221
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1442				3494	705
vC1, stage 1 conf vol					1411	
vC2, stage 2 conf vol					2083	
vCu, unblocked vol	1442				3494	705
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	0				0	41
cM capacity (veh/h)	451				0	372

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	828	426	426	705	705	32	232
Volume Left	828	0	0	0	0	0	11
Volume Right	0	0	0	0	0	32	221
cSH	451	1700	1700	1700	1700	1700	0
Volume to Capacity	1.84	0.25	0.25	0.41	0.41	0.02	Err
Queue Length 95th (ft)	1325	0	0	0	0	0	Err
Control Delay (s)	405.6	0.0	0.0	0.0	0.0	0.0	Err
Lane LOS	F						F
Approach Delay (s)	199.9			0.0			Err
Approach LOS							F

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

7: SR 46 East & Jardine Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	140	690	0	0	980	43	0	0	0	30	0	340
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	147	726	0	0	1032	45	0	0	0	32	0	358
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1077			726			1895	2098	363	1689	2053	516
vC1, stage 1 conf vol							1021	1021		1032	1032	
vC2, stage 2 conf vol							874	1077		658	1021	
vCu, unblocked vol	1077			726			1895	2098	363	1689	2053	516
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.6	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.6	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	76			100			100	100	100	84	100	28
cM capacity (veh/h)	626			886			10	129	639	193	190	496

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	147	363	363	0	516	516	45	0	0	32	358
Volume Left	147	0	0	0	0	0	0	0	0	32	0
Volume Right	0	0	0	0	0	0	45	0	0	0	358
cSH	626	1700	1700	1700	1700	1700	1700	1700	1700	193	496
Volume to Capacity	0.24	0.21	0.21	0.00	0.30	0.30	0.03	0.00	0.00	0.16	0.72
Queue Length 95th (ft)	23	0	0	0	0	0	0	0	0	14	145
Control Delay (s)	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	28.8
Lane LOS	B							A	A	D	D
Approach Delay (s)	2.1			0.0				0.0		28.7	
Approach LOS								A		D	

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek Rd & Airport

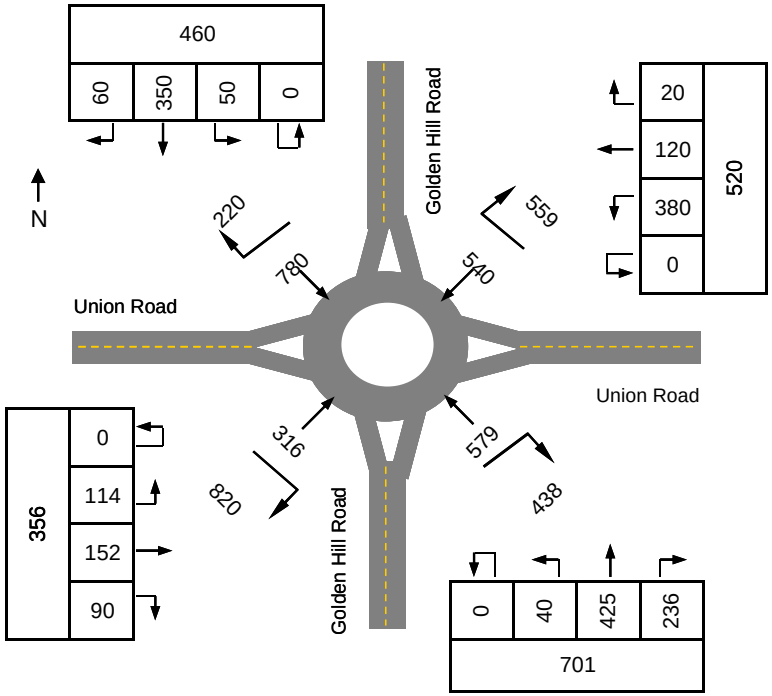
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	0	60	0	16	0	537	280	10	110	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	65	0	17	0	584	304	11	120	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	895	1029	120	877	877	736	120			888		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	895	1029	120	877	877	736	120			888		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)												
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	100	100	100	74	100	96	100			98		
cM capacity (veh/h)	229	213	883	246	263	389	1358			689		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	83	888	130
Volume Left	0	65	0	11
Volume Right	0	17	304	0
cSH	1700	267	1358	689
Volume to Capacity	0.00	0.31	0.00	0.02
Queue Length 95th (ft)	0	32	0	1
Control Delay (s)	0.0	24.4	0.0	1.0
Lane LOS	A	C		A
Approach Delay (s)	0.0	24.4	0.0	1.0
Approach LOS	A	C		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.92	Time	AM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	701	316	978	0.78	20	C	200
South	460	540	812	0.62	16	C	100
East	356	780	665	0.58	18	C	100
West	520	579	786	0.72	20	C	150
All	2037				19	C	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***

**** Assumes a queued vehicle length of 25 feet***

1: SR 46 East & Hwy 101 SB Off-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00						1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		3438	1503	2918	3343						1415	1404
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		3438	1503	2918	3343						1415	1404
Volume (vph)	0	880	270	1248	892	0	0	0	0	310	10	240
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	926	284	1314	939	0	0	0	0	326	11	253
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	144
Lane Group Flow (vph)	0	926	197	1314	939	0	0	0	0	0	337	109
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	5%	5%	20%	8%	0%	0%	0%	0%	29%	0%	15%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.4	31.4	47.2	82.7						27.9	27.9
Effective Green, g (s)		32.0	32.0	48.0	84.0						28.0	28.0
Actuated g/C Ratio		0.27	0.27	0.40	0.70						0.23	0.23
Clearance Time (s)		4.6	4.6	4.8	5.3						4.1	4.1
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		917	401	1167	2340						330	328
v/s Ratio Prot		c0.27		c0.45	0.28							
v/s Ratio Perm			0.13								0.24	0.08
v/c Ratio		1.01	0.49	1.13	0.40						1.02	0.33
Uniform Delay, d1		44.0	37.1	36.0	7.5						46.0	38.2
Progression Factor		1.00	1.00	0.22	1.27						1.00	1.00
Incremental Delay, d2		32.2	4.2	57.9	0.2						55.1	0.6
Delay (s)		76.2	41.4	65.8	9.7						101.1	38.8
Level of Service		E	D	E	A						F	D
Approach Delay (s)		68.0			42.4			0.0			74.4	
Approach LOS		E			D			A			E	

Intersection Summary			
HCM Average Control Delay	54.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

2: SR 46 East & Hwy 101 NB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.86		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.85			0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1504	3282			5649		1570	1436			1729	
Flt Permitted	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (perm)	1504	3282			5649		1570	1436			1729	
Volume (vph)	310	880	0	0	1759	182	370	10	620	10	0	10
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	326	926	0	0	1852	192	389	11	653	11	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	82	0	0	0	0
Lane Group Flow (vph)	326	926	0	0	2044	0	389	582	0	0	22	0
Confl. Peds. (#/hr)	10		10	10		10						
Heavy Vehicles (%)	20%	10%	0%	0%	12%	30%	15%	0%	13%	0%	0%	0%
Turn Type	Prot						Split			Split		
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	23.0	63.1			35.0		40.9	40.9			1.8	
Effective Green, g (s)	23.0	64.2			37.2		42.0	42.0			1.8	
Actuated g/C Ratio	0.19	0.54			0.31		0.35	0.35			0.02	
Clearance Time (s)	4.0	5.1			6.2		5.1	5.1			4.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.5	4.5			2.0	
Lane Grp Cap (vph)	288	1756			1751		550	503			26	
v/s Ratio Prot	c0.22	0.28			c0.36		0.25	c0.41			c0.01	
v/s Ratio Perm												
v/c Ratio	1.13	0.53			1.17		0.71	1.16			0.85	
Uniform Delay, d1	48.5	18.1			41.4		33.7	39.0			59.0	
Progression Factor	0.82	0.59			1.00		1.00	1.00			1.00	
Incremental Delay, d2	63.9	0.1			81.9		4.7	91.2			106.7	
Delay (s)	103.7	10.8			123.3		38.4	130.2			165.7	
Level of Service	F	B			F		D	F			F	
Approach Delay (s)		35.0			123.3			96.3			165.7	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	91.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

3: SR 46 East & Buena Vista

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3223	3112	1494	1719	1538
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	3223	3112	1494	1719	1538
Volume (vph)	300	1210	1742	123	110	200
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	316	1274	1834	129	116	211
RTOR Reduction (vph)	0	0	0	48	0	189
Lane Group Flow (vph)	316	1274	1834	81	116	22
Confl. Peds. (#/hr)	10			10		
Heavy Vehicles (%)	5%	12%	16%	5%	5%	5%
Turn Type	Prot			Perm		Perm
Protected Phases	5	2 7!	6		7!	
Permitted Phases				6		7
Actuated Green, G (s)	27.7	135.7	79.2	79.2	13.1	13.1
Effective Green, g (s)	27.2	135.7	82.5	82.5	14.0	14.0
Actuated g/C Ratio	0.20	1.00	0.61	0.61	0.10	0.10
Clearance Time (s)	3.5		7.3	7.3	4.9	4.9
Vehicle Extension (s)	3.5		3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	345	3223	1892	908	177	159
v/s Ratio Prot	c0.18	0.40	c0.59		c0.07	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.92	0.40	0.97	0.09	0.66	0.14
Uniform Delay, d1	53.1	0.0	25.4	11.0	58.5	55.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.4	0.1	14.1	0.1	8.8	0.5
Delay (s)	81.5	0.1	39.5	11.1	67.3	55.8
Level of Service	F	A	D	B	E	E
Approach Delay (s)		16.3	37.6		59.9	
Approach LOS		B	D		E	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	135.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3139	1455	3335	3034	1460	3335	3380		3335	1810	1502
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3139	1455	3335	3034	1460	3335	3380		3335	1810	1502
Volume (vph)	200	920	200	69	1454	176	200	280	30	220	350	210
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	211	968	211	73	1531	185	211	295	32	232	368	221
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	211	968	211	73	1531	185	211	327	0	232	368	221
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	10.7	60.3	60.3	5.0	54.6	54.6	11.5	30.1		10.1	28.7	28.7
Effective Green, g (s)	10.2	63.6	63.6	4.5	57.9	57.9	12.4	31.0		11.0	29.6	29.6
Actuated g/C Ratio	0.08	0.50	0.50	0.04	0.46	0.46	0.10	0.25		0.09	0.23	0.23
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	270	1583	734	119	1393	670	328	831		291	425	353
v/s Ratio Prot	c0.06	0.31		0.02	c0.50		0.06	0.10		c0.07	c0.20	
v/s Ratio Perm			0.15			0.13						0.15
v/c Ratio	0.78	0.61	0.29	0.61	1.10	0.28	0.64	0.39		0.80	0.87	0.63
Uniform Delay, d1	56.9	22.4	18.1	59.9	34.1	21.1	54.7	39.7		56.5	46.3	43.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.7	0.7	0.2	6.4	56.0	0.2	4.5	0.4		14.4	17.0	3.6
Delay (s)	69.5	23.1	18.3	66.4	90.1	21.3	59.2	40.1		70.9	63.3	46.9
Level of Service	E	C	B	E	F	C	E	D		E	E	D
Approach Delay (s)		29.4			82.0			47.6			61.0	
Approach LOS		C			F			D			E	

Intersection Summary			
HCM Average Control Delay	58.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	126.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	890	270	748	1579	10	190	10	500	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	937	284	787	1662	11	200	11	526	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1673			1221			3506	4347	611	4263	4484	836
vC1, stage 1 conf vol							1100	1100		3242	3242	
vC2, stage 2 conf vol							2406	3247		1021	1242	
vCu, unblocked vol	1673			1221			3506	4347	611	4263	4484	836
tC, single (s)	4.1			4.2			7.6	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)							6.6	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			0			0	0	0	0	0	100
cM capacity (veh/h)	389			550			0	0	430	0	0	314

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	11	625	596	787	1108	565	211	526	0	0
Volume Left	11	0	0	787	0	0	200	0	0	0
Volume Right	0	0	284	0	0	11	0	526	0	0
cSH	389	1700	1700	550	1700	1700	0	430	1700	1700
Volume to Capacity	0.03	0.37	0.35	1.43	0.65	0.33	Err	1.22	0.00	0.00
Queue Length 95th (ft)	2	0	0	937	0	0	Err	533	0	0
Control Delay (s)	14.5	0.0	0.0	225.0	0.0	0.0	Err	148.6	0.0	0.0
Lane LOS	B			F			F	F	A	A
Approach Delay (s)	0.1			72.0			Err		0.0	
Approach LOS							F		A	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	310	1080	1440	20	10	827
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	326	1137	1516	21	11	871
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1537				2737	758
vC1, stage 1 conf vol					1516	
vC2, stage 2 conf vol					1221	
vCu, unblocked vol	1537				2737	758
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	21				77	0
cM capacity (veh/h)	414				46	343

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	326	568	568	758	758	21	881
Volume Left	326	0	0	0	0	0	11
Volume Right	0	0	0	0	0	21	871
cSH	414	1700	1700	1700	1700	1700	319
Volume to Capacity	0.79	0.33	0.33	0.45	0.45	0.01	2.77
Queue Length 95th (ft)	171	0	0	0	0	0	1868
Control Delay (s)	39.1	0.0	0.0	0.0	0.0	0.0	828.1
Lane LOS	E						F
Approach Delay (s)	8.7			0.0			828.1
Approach LOS							F

Intersection Summary			
Average Delay	191.3		
Intersection Capacity Utilization	118.7%	ICU Level of Service	H
Analysis Period (min)	15		

7: SR 46 East & Jardine Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	240	820	0	0	1300	30	0	0	0	43	0	170
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	253	863	0	0	1368	32	0	0	0	45	0	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1400			863			2232	2768	432	2305	2737	684
vC1, stage 1 conf vol							1368	1368		1368	1368	
vC2, stage 2 conf vol							863	1400		937	1368	
vCu, unblocked vol	1400			863			2232	2768	432	2305	2737	684
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.6	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.6	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	46			100			100	100	100	52	100	53
cM capacity (veh/h)	469			788			7	9	578	94	87	384

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	253	432	432	0	684	684	32	0	0	45	179
Volume Left	253	0	0	0	0	0	0	0	0	45	0
Volume Right	0	0	0	0	0	0	32	0	0	0	179
cSH	469	1700	1700	1700	1700	1700	1700	1700	1700	94	384
Volume to Capacity	0.54	0.25	0.25	0.00	0.40	0.40	0.02	0.00	0.00	0.48	0.47
Queue Length 95th (ft)	79	0	0	0	0	0	0	0	0	52	60
Control Delay (s)	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.1	22.3
Lane LOS	C							A	A	F	C
Approach Delay (s)	4.8			0.0				0.0		32.9	
Approach LOS								A		D	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek & Airport

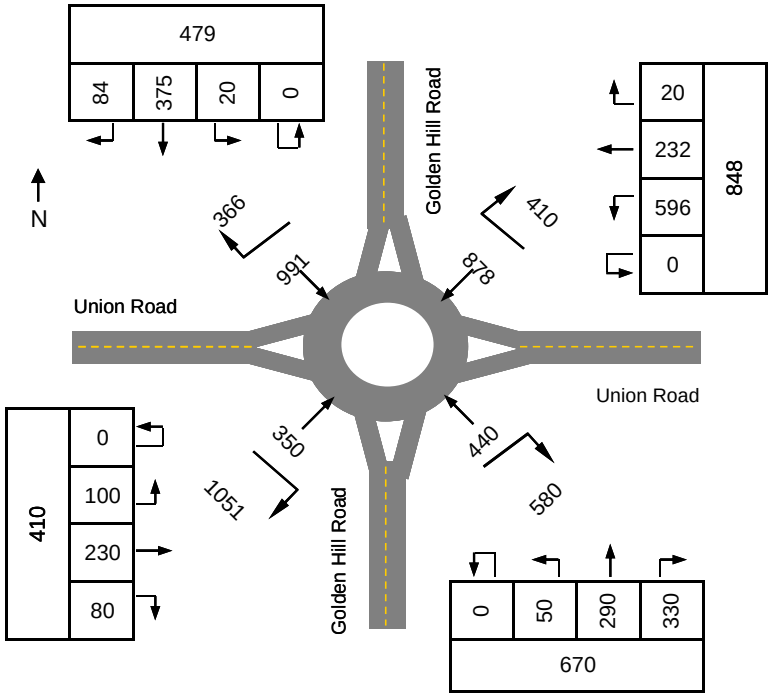
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	3	142	280	0	10	0	130	100	13	425	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	3	149	295	0	11	0	137	105	14	447	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	675	717	447	815	664	189	447			242		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	675	717	447	815	664	189	447			242		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)												
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	99	99	74	0	100	99	100			99		
cM capacity (veh/h)	336	329	573	200	354	806	1019			1221		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	156	305	242	461
Volume Left	3	295	0	14
Volume Right	149	11	105	0
cSH	557	205	1019	1221
Volume to Capacity	0.28	1.49	0.00	0.01
Queue Length 95th (ft)	28	466	0	1
Control Delay (s)	14.0	285.8	0.0	0.4
Lane LOS	B	F		A
Approach Delay (s)	14.0	285.8	0.0	0.4
Approach LOS	B	F		

Intersection Summary			
Average Delay	77.0		
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (HCM 2000 - AVERAGE VALUES)

Type of Design		Single-Lane Roundabout					
Period (hr)	0.25	Date	7/1/1905	E-W	Union Road		
PHF	0.95	Time	PM	N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	670	350	951	0.74	19	C	175
South	479	878	613	0.82	32	D	225
East	410	991	558	0.77	30	D	175
West	848	440	882	***1.01***	55	***F***	***475***
All	2407				36	E	



Capacity based on average of upper and lower values provided in Highway Capacity Manual 2000

Does not account for flared entry lanes or pedestrian effects.

*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***

**** Assumes a queued vehicle length of 25 feet***

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3112	1486	3335	4550	1488	3335	3376		3335	1810	1512
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3112	1486	3335	4550	1488	3335	3376		3335	1810	1512
Volume (vph)	350	1104	210	50	1080	230	280	320	39	136	160	150
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	368	1162	221	53	1137	242	295	337	41	143	168	158
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	368	1162	221	53	1137	242	295	378	0	143	168	158
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	5%	16%	5%	5%	14%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	15.3	46.8	46.8	3.2	34.7	34.7	14.3	24.2		8.3	18.2	18.2
Effective Green, g (s)	14.8	50.1	50.1	2.7	38.0	38.0	15.2	25.1		9.2	19.1	19.1
Actuated g/C Ratio	0.14	0.49	0.49	0.03	0.37	0.37	0.15	0.24		0.09	0.19	0.19
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	479	1512	722	87	1677	548	492	822		298	335	280
v/s Ratio Prot	c0.11	c0.37		0.02	0.25		c0.09	0.11		0.04	0.09	
v/s Ratio Perm			0.15			0.16						c0.10
v/c Ratio	0.77	0.77	0.31	0.61	0.68	0.44	0.60	0.46		0.48	0.50	0.56
Uniform Delay, d1	42.5	21.7	16.0	49.7	27.4	24.5	41.1	33.2		44.7	37.7	38.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	6.6	2.4	0.2	8.0	1.1	0.6	2.1	0.5		1.4	1.4	2.8
Delay (s)	49.1	24.2	16.2	57.7	28.5	25.1	43.2	33.7		46.1	39.1	41.0
Level of Service	D	C	B	E	C	C	D	C		D	D	D
Approach Delay (s)		28.4			29.0			37.9			41.9	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	31.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	103.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

5: SR 46 East & Union Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	3097		3335	3112		1719	1900	1538	1805	1900	1615
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	3097		3335	3112		1719	1900	1538	1805	1900	1615
Volume (vph)	561	568	150	379	1147	10	220	246	242	10	21	63
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	591	598	158	399	1207	11	232	259	255	11	22	66
RTOR Reduction (vph)	0	19	0	0	1	0	0	0	196	0	0	60
Lane Group Flow (vph)	591	737	0	399	1217	0	232	259	59	11	22	6
Heavy Vehicles (%)	0%	15%	5%	5%	16%	0%	5%	0%	5%	0%	0%	0%
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	20.2	47.8		16.8	44.4		16.5	24.7	24.7	0.7	8.9	8.9
Effective Green, g (s)	20.2	47.8		16.8	44.4		16.5	24.7	24.7	0.7	8.9	8.9
Actuated g/C Ratio	0.19	0.45		0.16	0.42		0.16	0.23	0.23	0.01	0.08	0.08
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	667	1397		529	1304		268	443	358	12	160	136
v/s Ratio Prot	c0.17	c0.24		0.12	c0.39		c0.13	c0.14		0.01	0.01	
v/s Ratio Perm									0.04			0.00
v/c Ratio	0.89	0.53		0.75	0.93		0.87	0.58	0.17	0.92	0.14	0.04
Uniform Delay, d1	41.8	21.0		42.6	29.4		43.7	36.1	32.4	52.6	45.0	44.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.4	0.4		6.0	12.2		24.0	2.0	0.2	212.2	0.4	0.1
Delay (s)	55.2	21.3		48.7	41.6		67.7	38.1	32.7	264.8	45.4	44.7
Level of Service	E	C		D	D		E	D	C	F	D	D
Approach Delay (s)		36.2			43.4			45.4			69.3	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM Average Control Delay	41.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	810	1340	30	0	210
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	853	1411	32	0	221
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1442				1837	705
vC1, stage 1 conf vol					1411	
vC2, stage 2 conf vol					426	
vCu, unblocked vol	1442				1837	705
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	41
cM capacity (veh/h)	451				177	372

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	SB 1
Volume Total	426	426	705	705	32	221
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	32	221
cSH	1700	1700	1700	1700	1700	372
Volume to Capacity	0.25	0.25	0.41	0.41	0.02	0.59
Queue Length 95th (ft)	0	0	0	0	0	92
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	27.9
Lane LOS						D
Approach Delay (s)	0.0		0.0			27.9
Approach LOS						D

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

8: Dry Creek Rd & Airport

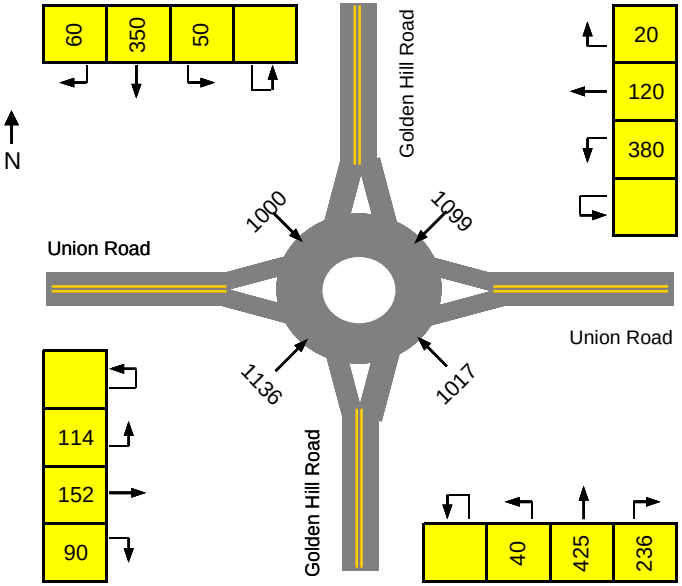
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	0	60	0	16	0	537	280	10	110	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	65	0	17	0	584	304	11	120	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					3							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	895	1029	120	877	877	736	120			888		
vC1, stage 1 conf vol				736	736							
vC2, stage 2 conf vol				141	141							
vCu, unblocked vol	895	1029	120	877	877	736	120			888		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)				6.3	5.7							
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	100	100	100	83	100	96	100			98		
cM capacity (veh/h)	229	213	883	379	393	389	1358			689		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	83	888	130
Volume Left	0	65	0	11
Volume Right	0	17	304	0
cSH	1700	381	1358	689
Volume to Capacity	0.00	0.22	0.00	0.02
Queue Length 95th (ft)	0	20	0	1
Control Delay (s)	0.0	17.1	0.0	1.0
Lane LOS	A	C		A
Approach Delay (s)	0.0	17.1	0.0	1.0
Approach LOS	A	C		

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (FHWA)

Type of Design		Double-Lane Roundabout						
Period (hr)	0.25	Date	2035		E-W	Union Road		
PHF	0.92	Time	PM		N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**2nd Lane Storage (veh)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	701	0	316	1099	0.69	15	C	150
South	460	0	540	1019	0.49	12	B	75
East	356	1000	780	1864	0.21	7	A	25
West	520	1000	579	2008	0.28	7	A	25
All	2037					11	B	



Source: Roundabouts: An Informational Guide (FHWA, 2000), Equation A-9
Capacity calculation is valid for inscribed diameters of 40 to 60 m (130 to 200 ft).
Does not account for flared entry lanes or pedestrian effects.
*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***
**** Assumes a queued vehicle length of 25 feet***

4: SR 46 East & Golden Hill Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3335	3139	1460	3335	4359	1465	3335	3380		3335	1810	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3335	3139	1460	3335	4359	1465	3335	3380		3335	1810	1504
Volume (vph)	200	920	200	69	1454	176	200	280	30	220	350	210
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	211	968	211	73	1531	185	211	295	32	232	368	221
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	211	968	211	73	1531	185	211	327	0	232	368	221
Confl. Peds. (#/hr)			10			10			10			10
Heavy Vehicles (%)	5%	15%	5%	5%	19%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	10.2	50.4	50.4	4.7	44.9	44.9	11.1	27.5		10.1	26.5	26.5
Effective Green, g (s)	9.7	53.7	53.7	4.2	48.2	48.2	12.0	28.4		11.0	27.4	27.4
Actuated g/C Ratio	0.09	0.47	0.47	0.04	0.43	0.43	0.11	0.25		0.10	0.24	0.24
Clearance Time (s)	3.5	7.3	7.3	3.5	7.3	7.3	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0	3.0	3.5	3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	286	1488	692	124	1854	623	353	847		324	438	364
v/s Ratio Prot	c0.06	0.31		0.02	c0.35		0.06	0.10		c0.07	c0.20	
v/s Ratio Perm			0.14			0.13						0.15
v/c Ratio	0.74	0.65	0.30	0.59	0.83	0.30	0.60	0.39		0.72	0.84	0.61
Uniform Delay, d1	50.6	22.7	18.3	53.7	28.8	21.4	48.3	35.2		49.6	40.9	38.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.3	1.0	0.3	4.5	3.1	0.3	2.9	0.3		7.6	13.8	3.0
Delay (s)	58.8	23.7	18.6	58.2	32.0	21.7	51.2	35.6		57.2	54.7	41.2
Level of Service	E	C	B	E	C	C	D	D		E	D	D
Approach Delay (s)		28.3			32.0			41.7			51.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	113.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	3082		3335	3112		1719	1900	1538	1805	1900	1615
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	3082		3335	3112		1719	1900	1538	1805	1900	1615
Volume (vph)	208	692	270	611	1232	10	190	122	388	10	137	277
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	219	728	284	643	1297	11	200	128	408	11	144	292
RTOR Reduction (vph)	0	29	0	0	1	0	0	0	294	0	0	157
Lane Group Flow (vph)	219	983	0	643	1307	0	200	128	114	11	144	135
Heavy Vehicles (%)	0%	15%	5%	5%	16%	0%	5%	0%	5%	0%	0%	0%
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	11.2	42.6		26.8	58.2		17.7	33.8	33.8	1.3	17.4	17.4
Effective Green, g (s)	11.2	42.6		26.8	58.2		17.7	33.8	33.8	1.3	17.4	17.4
Actuated g/C Ratio	0.09	0.35		0.22	0.48		0.15	0.28	0.28	0.01	0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	325	1090		742	1503		253	533	431	19	274	233
v/s Ratio Prot	0.06	0.32		c0.19	c0.42		c0.12	0.07		0.01	0.08	
v/s Ratio Perm									0.07			c0.08
v/c Ratio	0.67	0.90		0.87	0.87		0.79	0.24	0.27	0.58	0.53	0.58
Uniform Delay, d1	52.9	37.0		45.1	27.8		49.6	33.4	33.7	59.3	47.7	48.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.4	10.3		10.4	5.7		15.4	0.2	0.3	36.3	1.8	3.4
Delay (s)	58.3	47.3		55.5	33.4		65.0	33.7	34.0	95.6	49.5	51.6
Level of Service	E	D		E	C		E	C	C	F	D	D
Approach Delay (s)		49.2			40.7			42.4			52.0	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	44.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

6: SR 46 East & Airport Road

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	1080	1440	20	0	413
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	1137	1516	21	0	435
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					Raised	
Median storage veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1537				2084	758
vC1, stage 1 conf vol					1516	
vC2, stage 2 conf vol					568	
vCu, unblocked vol	1537				2084	758
tC, single (s)	4.2				6.9	7.0
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	0
cM capacity (veh/h)	414				154	343

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	SB 1
Volume Total	568	568	758	758	21	435
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	21	435
cSH	1700	1700	1700	1700	1700	343
Volume to Capacity	0.33	0.33	0.45	0.45	0.01	1.27
Queue Length 95th (ft)	0	0	0	0	0	493
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	173.5
Lane LOS						F
Approach Delay (s)	0.0		0.0			173.5
Approach LOS						F

Intersection Summary			
Average Delay	24.3		
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

8: Dry Creek & Airport

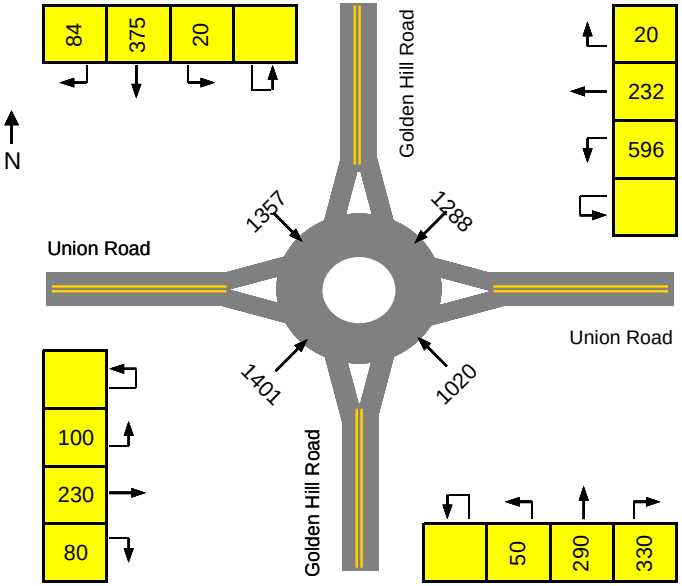
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	3	142	280	0	10	0	130	100	13	425	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	3	149	295	0	11	0	137	105	14	447	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					3							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	675	717	447	815	664	189	447			242		
vC1, stage 1 conf vol				189	189							
vC2, stage 2 conf vol				626	475							
vCu, unblocked vol	675	717	447	815	664	189	447			242		
tC, single (s)	7.3	6.7	6.4	7.3	6.7	6.4	4.3			4.3		
tC, 2 stage (s)				6.3	5.7							
tF (s)	3.7	4.2	3.5	3.7	4.2	3.5	2.4			2.4		
p0 queue free %	99	99	74	7	100	99	100			99		
cM capacity (veh/h)	336	329	573	317	508	806	1019			1221		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	156	305	242	461
Volume Left	3	295	0	14
Volume Right	149	11	105	0
cSH	557	323	1019	1221
Volume to Capacity	0.28	0.94	0.00	0.01
Queue Length 95th (ft)	28	241	0	1
Control Delay (s)	14.0	73.4	0.0	0.4
Lane LOS	B	F		A
Approach Delay (s)	14.0	73.4	0.0	0.4
Approach LOS	B	F		

Intersection Summary			
Average Delay	21.3		
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

ROUNDABOUT OPERATIONS ANALYSIS (FHWA)

Type of Design		Double-Lane Roundabout						
Period (hr)	0.25	Date	2035		E-W	Union Road		
PHF	0.95	Time	PM		N-S	Golden Hill Road		
Approach	**Total Volume (vph)**	**2nd Lane Storage (veh)**	**Circ. Flow (vph)**	**Capacity (vph)**	**v/c**	**Control Delay (sec)**	**LOS***	**Queue** (ft)**
North	670	0	350	1087	0.65	14	B	125
South	479	0	878	898	0.56	14	B	100
East	410	1000	991	1713	0.25	8	A	25
West	848	1000	440	2108	0.42	8	A	50
All	2407					11	B	



Source: Roundabouts: An Informational Guide (FHWA, 2000), Equation A-9
Capacity calculation is valid for inscribed diameters of 40 to 60 m (130 to 200 ft).
Does not account for flared entry lanes or pedestrian effects.
*** LOS criteria for unsignalized intersections from the Highway Capacity Manual 2000***
**** Assumes a queued vehicle length of 25 feet***

APPENDIX F

Visual Simulation Methodology

CDCR – Paso Robles Property Master Reuse Plan EIR
Visual Simulation Methodology

For CDCR Estrella, eight visual simulations were produced. These simulations included: proposed Level II structures, re-entry facility, and proposed Cal-fire structures, guard towers, new fencing, lighting, an entry monument, and changes to parking/landscape areas around the admin buildings. These simulations also included the removal of existing buildings proposed for demolition, and trees that conflicted with CDCR guidelines, and policies.

To create the visual simulations, Key Observation Points (KOP) were selected. Photos of the existing conditions from each KOP were taken using various digital cameras. The cameras used are a Fuji FinePix 2400Zoom, and a Nikon D300. For each of the cameras and their respective existing conditions photos the digital focal length was noted, and then converted to a corresponding film focal length in our virtual cameras.

For each simulation, the location of each KOP was placed on a geo-referenced aerial photo using Arc Map (by ESRI). A Digital Elevation Model (topography), surrounding streets, aerial imagery and KOP points shape file were combined to create a project map of the project site. This project map was exported from Arc Map as an image file and as 3d geometry for use in AutoCAD.

In AutoCAD a virtual model was then created from the combination of our Arc Map data, and provided design data of the proposed project site. Using the geo-referenced data imported from Arc Map as a base, 3d models of the proposed new structures were created and located on the level II site. 3d models were also created of the existing Level II structures to assist with camera matching (CAA's) and provide visual references needed to complete our simulations.

Additional 3d models were created for both the Cal-Fire expansion, and the proposed re-entry facility. The 3d model of the re-entry facility was created by a consultant in Autodesk's Revit. The BIM model was exported to a file format that is compatible with 3d Studio Max (3d Max), and later imported into our final simulation model. The 3d model of the proposed Cal-fire buildings was created in AutoCAD and later imported into our final simulation model.

In 3d Max, the existing project site was replicated. A 2d plane was created using the same dimensions as the project map .jpeg (from our earlier created Arc Map data). The project map .jpeg was draped on top of that plane. For example, if the project map was sized at 10" X 20", and the scale was 1:2400, or 1 inch = 200 ft, the 2D plane created in 3d Max needed to be 2000' X 4000'. This assures that distances in the 3d model are exactly the same as distances on the project area map. Then all of our 3d modeled data was imported and added to our 3d project site in 3d Max.

Next, virtual cameras needed to be created that mirrored the digital cameras we used to take the existing conditions photos. In 3d Max, it is possible for the user to specify the focal length and Field of View of a virtual camera. Most digital cameras use image sensors that are not "full frame" so we have to apply conversion equations to ensure appropriate focal length values were used for all of the visual simulations. The virtual cameras are then placed in the correct locations that correlate with the point references created in Arc Map.

Now that the cameras are in their correct location in the model, they need to be aligned correctly. To do this, the existing buildings and other objects i.e. trees, light poles, roads, and fence lines, etc. that are visible in the existing condition photos are identified on the aerial photo. These objects are referred to as Camera Alignment Aids or CAA's. When a CAA is identified, a 3d object is created and placed in the model on top of its location on the aerial photo. For each camera view, a minimum of three CAA's were used to align the camera. Using the existing conditions photo as the background, the camera target (the point which the camera is focusing on) was moved accordingly to match the CAA's with their place in the photo. Another component to matching the virtual camera to the actual camera was to incorporate the

elevations of each of the CAA's, as well as the camera itself. Using topographical information for the project the elevations of both the photo point and the CAA's were recorded, and incorporated into the 3d model. The camera target was further adjusted to match the elevations of each of the CAA's, resulting in a virtual camera that was aligned correctly in all 3 directions (X,Y, & Z).

Now that the virtual camera is created, and its alignment exactly matched with its real-life counterpart, light and shadow needed to be created matching our existing conditions photos. 3d Max has a day lighting component that allows the user to insert variables such as time of day, month and year, location the photos were taken (determines the angle of the sun to the ground plane), etc. Digital cameras record most of this data in the metadata of image files. We extract this data and input it into 3d max to make sure each rendered image is accurately lit for the time of day the photos were taken.

Once we are satisfied that our virtual conditions match the physical conditions at the project site we use each of the virtual cameras to render an image of the 3d model, project site and background image. "Rendering" in 3d studio max is essentially taking a snapshot of the 3d model through the lenses of our virtual cameras. These rendered images are saved to the project directory.

The final steps for creating our simulations are completed in Adobe's Photoshop. For the CDCR simulations we needed to digitally paint out existing trees that will be removed. We filled in the voids left by the trees with data from our series of site photos. The digital painted layers were then blended with the rendered image of our 3d model. All of the layers were then further blended to make sure it read well as a flattened image. In Photoshop masks are created on the layers, and those areas of an image that would be obscured by objects in the photo were erased. To finish the process all layers are flattened and images are saved for use in the environmental documents.