Draft Environmental Impact Report

Correctional Facility at California City

SCH No. 2017121069

Prepared for City of California City 21000 Hacienda Boulevard California City, California 93505

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LIST OF ACRONYMS

Α

AAM Annual Arithmetic Mean

AB Assembly Bill

ABE Adult Basic Education

ACA American Correctional Association
ACA American Correctional Association

ADT Average Daily Trips

APEFZ Alquist-Priolo Earthquake Fault Zoning

APS auxiliary power systems

ARPA Archaeological Resources Protection Act

ASP Avenal State Prison

ATE Associated Transportation Engineers
AVEK Antelope Valley East Kern Agency

AVH Antelope Valley Hospital

AVHD Antelope Valley Healthcare District

В

BAT Best Available Technology Economically Achievable

BAU Business-As-Usual Bcf billion cubic feet

BCT Best Conventional Pollutant Control

bgs below the ground surface
BLM Bureau of Land Management
BMPs Best Management Practices
BOP Federal Bureau of Prisons

BPS booster pump station

BPS Best Performance Standard

Btu British thermal units

C

CAA Clean Air Act

CAAQS California Ambient Air Quality Standards

CAFE corporate average fuel economy

Cal/OSHA California Occupational Safety and Health

CalARP California Accidental Release

CalEEMod California Emissions Estimator Model

CalEPA California Environmental Protection Agency

CalFire California Department of Forestry and Fire Protection

CalGreen California Green Building Standards Code

Code

CalRecycle California Department of Resources Recycling and Recovery

Caltrans California Department of Transportation

CAPCOA California Air Pollution Control Officers Association

CARB California Air Resources Board

CBC California Building Code

CBSC California Building Standards Commission

CCCC California City Correctional Center
CCFD California City Fire Department
CCH Consortium of California Herbaria
CCPD California City Police Department
CCR California Code of Regulations

CCTV Closed Circuit Television

CDCA California Desert Conservation Area

CDCR California Department of Corrections and Rehabilitation

CDFW California Department of Fish and Wildlife

CDMG California Department of Conversation, Division of Mines and Geology

CEC California Energy Commission

CEQA California Environmental Quality Act
CFCC Correctional Facility at California City

CFR Code of Federal Regulations

CH₄ methane

CHRIS California Historical Resources Information System

CIWMB California Integrated Waste Management

CMP Congestion Management Program
CNDDB California Natural Diversity Database
CNEL community noise equivalent level
CNRA California Natural Resources Agency

CO carbon monoxide CO₂ carbon dioxide

CO₂e Carbon dioxide equivalent

CPTED Community Policing Through Environmental Design

CPUC California Public Utilities Commission

CRHR California Register of Historical Resources

CRPR California Rare Plant Rank

CSMP Construction Site Monitoring Program

CTG Control Techniques Guidelines

CUP conditional use permit

CUPA Certified Unified Program Agency

CWA Clean Water Act

cy cubic yards

D

dB decibel

dBA A-weighted decibels

DOI U.S. Department of the Interior

DOSH District Office of the California Division of Occupational Safety and Health

DRECP Desert Renewable Energy Conservation Plan

DTSC California Department of Toxic Substances Control

du/ac dwelling units per gross acre

Ε

EAFB Edwards Air Force Base

EHSD Environmental Health Services Division

EIR Environmental Impact Report

EKAPCD Eastern Kern Air Pollution Control District

EMS emergency medical services

EO Executive Order

ESA Environmentally Sensitive Area
ESTA Eastern Sierra Transit Authority

F

FAA Federal Aviation Administration

FEMA Federal Emergency Management Agency

FESA Federal Endangered Species Act

FHSZ fire hazard severity zone
FIRM Flood Insurance Rate Maps

FLPMA Federal Land Policy Management Act

ft feet

FTIP Federal Transportation Improvement Program

G

GED General Educational Development

GHG Greenhouse Gas

gpcd gallons per capita per day

gpm gallons per minute

gr/scf grains per standard cubic foot of gas at standard conditions

GWP global warming potential

Н

H₂SO₄ sulfuric acid

HCM Highway Capacity Manual HCP Habitat Conservation Plan

HFCs hydrofluorocarbons

HMMP Habitat Mitigation Monitoring Plan

HMP Hazard Mitigation Plan

HSWAs Hazardous and Solid Waste Amendments
HWCA California Hazardous Waste Control Act

Hz hertz

ı

IBC International Building Code

ICE U.S. Department of Homeland Security Immigration and Customs Enforcement

in/sec inches per second

IRWMG Integrated Regional Water Management Group IRWMP Integrated Regional Water Management Plan

ITP Incidental Take Permit

Κ

KCAPCD Kern County Air Pollution Control District

km/hr kilometers per hour kWh kilowatt-hours

L

lbs/day pounds per day

 $L_{\mbox{\scriptsize dn}}$ day-night average sound level $L_{\mbox{\scriptsize eq}}$ community noise equivalent level

LOS level of service

LRA Local Responsibility Area

LRWQCB Lahontan Regional Water Quality Control Board

LSA Lake or Streambed Alteration

M

m meter

MBTA Migratory Bird Treaty Act
MDAB Mojave Desert Air Basin
MEP Maximum Extent Practicable

MG million gallons

mg/m³ milligrams per cubic meter
MGD million gallon per day
MLD most likely descendant

MMRP Mitigation Monitoring and Reporting Program

MMs Mitigation Measures

MOU Memorandum of Understanding

mpg miles per gallon mph miles per hour

MPOs Metropolitan Planning Organizations

MPUD Mojave Public Utilities District

MRZs Mineral Resource Zones

msl mean sea level

MUSD Mojave Unified School District

Ν

N₂O nitrous oxide

NAAQS National Ambient Air Quality Standards

NAGPRA Native American Graves and Repatriation Act

NAHC Native American Heritage Commission

NALs Numeric Action Levels

NCCP Natural Community Conservation Plan
NEPA National Environmental Policy Act
NFIP National Flood Insurance Program
NFPA National Fire Protection Code

NHM Natural History Museum of Los Angeles County

NHPA National Historic Preservation Act

NHTSA National Highway Traffic Safety Administration

NO nitric oxide

NO2 nitrogen dioxide

NOA Notice of Availability

NOI Notice of Intent

NOP Notice of Preparation NOx oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places

0

O Open Space

 O_3 ozone

OHP Office of Historic Preservation

OHV off-highway vehicle

OPR Office of Planning and Research

Ρ

PA Public Address

PCC Portland-cement-concrete
PDF Project Design Feature

PFCs perfluorocarbons

PG&E Pacific Gas and Electric Company
PHSD Public Health Services Department

PM Particulate matter

PM10 respirable particulate matter equal to or less than 10 microns in diameter

PM2.5 fine particulate matter equal to or less than 2.5 microns in diameter

ppm parts per million ppv peak particle velocity

PRC California Public Resources Code

PRDs Permit Registration Documents
PVSP Pleasant Valley State Prison

R

RA Residential Agricultural

RACT Reasonable Available Control Technology

RAS return activated sludge

RCRA Resource Conservation and Recovery

RFP Reasonable Further Progress

RHNA Plan Regional Housing Needs Assessment Plan

RMP Risk Management Plan

RMS root mean square

RPS Renewables Portfolio Standard
RRH Ridgecrest Regional Hospital
RRs Regulatory Requirements

RTP/SCS Regional Transportation Plan/Sustainable Communities Strategy

RWD Report of Waste Discharge

RWQCB California Regional Water Quality Control Board

S

SAFE Safer Affordable Fuel-Efficient

SB Senate Bill

SCE Southern California Edison Company

sf square feet

SF₆ sulfur hexafluoride

SIP State Implementation Plan

SMARA Surface Mining and Reclamation Act of 1975

SMBMI San Manuel Band of Mission Indians SMGB State Mining and Geology Board

SO₂ sulfur dioxide

SoCalGas Southern California Gas Company

SOI Secretary of the Interior

SOx sulfur oxide SR State Route

SRA State Responsibility Area

SRRE Source Reduction and Recycling Element

SSJVIC Southern San Joaquin Valley Information Center

SWPPP Storm Water Pollution Prevention Plan SWRCB State Water Resources Control Board

Т

TACs Toxic air contaminants
TDH total dynamic head

TIA Traffic Impact Analysis
TIS Traffic Impact Study

TMDLs total maximum daily loads
TNW Traditional Navigable Water

tpd tons per day tpy tons per year

TSCA Toxic Substances Control Act

U

U.S. U.S. Highway
US U.S. Route

USACE U.S. Army Corps of Engineers

USC United States Code

USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

USMS United States Marshals Service
UWMPs Urban Water Management Plans

٧

VHFHSV Very High Fire Hazard Severity Zone

VMT vehicle miles traveled

VOCs volatile organic compounds

W

WDR Waste Discharge Requirements

WEAP Worker Environmental Awareness Program

WSA water supply assessment
WWTP Wastewater Treatment Plant

Symbols

°F Fahrenheit

μg/m³ micrograms per cubic meter

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

1.1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

This Draft Environmental Impact Report (Draft EIR or EIR) has been prepared to evaluate the potential environmental impacts associated with the proposed Correctional Facility at California City (CFCC) (also referred to in this EIR as the proposed Project or Project), as required under the California Environmental Quality Act (CEQA) of 1970, as amended (California Public Resources Code, Section 21000 et seq.); the State CEQA Guidelines (Title 14, California Code of Regulations [CCR], Chapter 3, Sections 15000 et seq.); and the City of California City's (City's) Environmental Review Regulations (Title 2, Chapter 6 of the City of California City Municipal Code).

Defined actions with the potential for causing a physical change in the environment are considered "Projects" under Section 21065 of CEQA and Section 15378 of the State CEQA Guidelines. All "Projects" are required to go through an environmental review process in accordance with CEQA and the State CEQA Guidelines. As the construction and operation of the CFCC, as proposed by CoreCivic, Inc. (CoreCivic) could lead to environmental impacts, it is considered a "Project" and thus, is subject to CEQA.

1.1.2 LEAD AGENCY

Section 15051 of the State CEQA Guidelines identifies the Lead Agency as the public entity with the greatest responsibility for carrying out or approving a project as a whole. The CFCC would be located in the City and the City would have to approve the construction and operation of the proposed CFCC. Thus, the City is serving as the Lead Agency under CEQA and is responsible for complying with CEQA, including the requisite environmental review process for the Project.

The City, as the Lead Agency, has determined that an EIR is required for the Project and has authorized the preparation of this EIR. The City circulated the Notice of Preparation (NOP) of an EIR between December 27, 2017 and February 5, 2018, and hosted a Scoping Meeting in the community on January 24, 2017 at the California City Council Chambers, to inform other public agencies and interested individuals that, as the Lead Agency, the City is preparing an EIR for the Project and to solicit input on issues that need to be addressed in the EIR. The City will be reviewing and considering the determinations of this EIR prior to its decision to approve, modify, or deny the Project and the associated actions necessary to implement the Project.

1.1.3 INTENDED USES OF THE ENVIRONMENTAL IMPACT REPORT

This EIR is an informational document prepared under the direction of the City for the following purposes:

- To satisfy the requirements of CEQA (*California Public Resources Code*, Sections 21000–21178) and the State CEQA Guidelines (*California Code of Regulations*, Title 14, Chapter 14, Sections 15000–15387).
- To inform the general public, the local community, and responsible, trustee, and interested public agencies of the scope of the proposed Project and to describe the potential significant environmental effects; measures to mitigate or avoid those effects; and alternatives to the proposed Project.

- To enable the City to consider environmental consequences when deciding whether to approve, modify or deny the proposed Project.
- To serve as a source document for responsible agencies to issue permits and approvals, as required, for implementation of the proposed Project.

As described in CEQA and the State CEQA Guidelines, Lead Agencies are charged with the duty to avoid or substantially lessen the significant environmental effects of projects within their jurisdiction. Where feasible alternatives or mitigation measures are not available to reduce significant environmental impacts to a less than significant level, impacts are considered significant and unavoidable.

As permitted under the State CEQA Guidelines (Section 15084 (d)(2),(e)), this EIR has been prepared by a consultant under contract to CoreCivic, the Project Applicant. However, the EIR has been prepared under the direction, review and input from the City staff and subjected to staff's independent review and analysis. As such, the Draft EIR, as circulated for public review, reflects the independent judgment of the City. If certified by the City, the conclusions reached in the EIR represent the City's independent judgment regarding the Project's potential environmental impacts.

As part of the EIR certification process, written Findings of Fact must be prepared for each significant adverse environmental effect, if any, identified in the Final EIR, as required by Section 15091 of the State CEQA Guidelines. If the Lead Agency certifies the Final EIR for a project that would have significant and unavoidable impacts, the Lead Agency shall also state, in writing, the specific reasons for approving the project based on the Final EIR and any other information in the public record. In satisfying this duty, the Lead Agency has an obligation to balance a project's significant effects on the environment with its economic, social, technological, legal, and other benefits. This "Statement of Overriding Considerations", if applicable, would explain the specific reasons that the benefits of a project make its unavoidable environmental effects acceptable to the Lead Agency. A Statement of Overriding Considerations is adopted after the Final EIR is certified and before action to approve a project has been taken. Additionally, the Lead Agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) in order to ensure the implementation of mitigation measures that have been identified in the EIR to reduce or avoid any significant adverse effects of the project on the environment during construction and/or operation.

The City is required to consider the information in the Final EIR (i.e., Draft EIR, MMRP, Comments, and Responses to Comments), and any other relevant information prior to a decision on whether to approve the proposed Project. The City will prepare the Findings of Fact, and, if necessary, a Statement of Overriding Considerations.

1.1.4 INCORPORATION BY REFERENCE

This EIR references several technical studies, analyses, and reports that have been used in the preparation of this EIR, as identified at the end of each section under the heading "References".

In accordance with Section 15150(b) of the State CEQA Guidelines, the location where the public may obtain and review the referenced documents used in the preparation of the EIR by appointment during normal business hours include the City of California City, City Hall at 21000 Hacienda Boulevard, California City, California 93505. As stated in Section 15150(f) of the State CEQA Guidelines, incorporation by reference is appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand.

1.2 ORGANIZATION OF THE EIR

This EIR is organized into the following sections:

Section 1.0: Introduction. This section provides an introduction to the EIR; the organization of the EIR; and the focus of the environmental analysis. A summary table of impacts and mitigation is provided. It also summarizes the environmental review process for the EIR; the scoping period; and the comments received by the City on the NOP during the scoping process.

Section 2.0: Environmental Setting. This section was prepared in accordance with Section 15125 of the CEQA Guidelines and includes a description of the Project site and the existing environmental setting of the Project site and the surrounding area. The existing local conditions on the Project site by environmental issue are described in this section. In addition, projections of future growth and development in the City are presented to serve as the basis for the cumulative analysis.

Section 3.0: Project Description. In accordance with Section 15124 of the CEQA Guidelines, this section outlines the Applicant's objectives for the CFCC; includes a description of the proposed site improvements and off-site infrastructure improvements; and discusses the operational characteristics of the Project. A discussion of discretionary actions needed to approve the Project and a list of other public agencies expected to use the EIR in their decision making are also included.

Section 4.0: Environmental Analysis. The analyses of the potential environmental impacts on each environmental issue area that may result from the proposed Project are provided in Section 4.0 of this EIR. This section includes the following subsections:

Section 4.1: Aesthetics

Section 4.2: Agriculture and Forestry Resources

Section 4.3: Air Quality

Section 4.4: Biological Resources

Section 4.5: Cultural Resources

Section 4.6: Energy

Section 4.7: Geology and Soils

Section 4.8: Greenhouse Gas Emissions

Section 4.9: Hazards and Hazardous Materials

Section 4.10: Hydrology and Water Quality

Section 4.11: Land Use and Planning

Section 4.12: Mineral Resources

Section 4.13: Noise

Section 4.14: Population and Housing

Section 4.15: Public Services and Recreation

Section 4.16: Transportation

Section 4.17: Tribal Cultural Resources

Section 4.18: Utilities and Service Systems

Section 4.19: Wildfire

More detailed discussion of the environmental analysis contained in each subsection is provided in Section 1.3.3 below.

Section 5.0: Project Alternatives. This section presents alternatives to the Project, which include Alternative 1: No Project; Alternative 2: 3,024-bed Correctional Facility on 107 acres; Alternative 3: 1,512-bed Correctional Facility on 107 acres; Alternative 4: Alternative Location; and Alternative 5: 1,512-bed Correctional Facility on 216.5 acres. Alternative 4 and Alternative 5 have been dismissed from further consideration for infeasibility; no reduction in impacts; and/or not meeting Project objective. A brief description of the remaining feasible alternatives and a comparison of the impacts of each alternative with the Project are provided in this section of the EIR. In accordance with Section 15126.6(e) of the State CEQA Guidelines, this section also identifies the environmentally superior alternative.

Section 6.0: CEQA-Mandated Sections. As required under Sections 15126(d), 15126.2(a) 15126.2(b) and 15126.2(d) of the CEQA Guidelines, the following topics are addressed in this section: significant environmental effects of the Project; significant environmental effects that cannot be avoided if the Project is implemented; and the growth-inducing impacts of the Project.

Section 7.0: List of EIR Preparers and Contributors. This section identifies the individuals responsible for preparing the EIR and persons consulted during the preparation of the EIR.

1.3 EIR FOCUS

1.3.1 ISSUES ADDRESSED IN THIS EIR

Since it has been determined at the start of the environmental review process that an EIR would be required for the Project, no Initial Study was prepared. Thus, all the environmental issue areas in the CEQA Guidelines Appendix G sample environmental checklist form are addressed in the EIR and are identified above in Section 1.2.

In compliance with Section 15064 of the State CEQA Guidelines, the determination of significance for each impact analysis question is based on the application of significance standards. Specifically, the significance standards are used to determine whether the impacts of the Project would be considered significant and unavoidable; would be less than significant with mitigation; would be less than significant; or the Project would have no impact. Significance standards are either (1) qualitative and are presented through substantiation of the impact determination provided in the "Impact Analysis" for each environmental issue area or (2) quantitative and are derived from regulatory standards or directives from the Lead Agency. Where regulatory standards apply, they are specified within that environmental issue area or EIR section.

Table 1-1, Summary of Potential Impacts, Mitigation Measures and Level of Significance, presents a summary of the potential environmental effects of the proposed; measures to mitigate impacts to the extent feasible; and expected status of effects following implementation of the mitigation measures. The more detailed evaluation of these issues is presented in Sections 4.1 through 4.19.

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Section 4.1 - Aesthetics	7		3
Threshold 4.1a Would the project have a substantial adverse effect on a scenic vista? Threshold 4.1b Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	The proposed Project would have no significant impacts on a scenic vista, as there are no scenic vistas in the vicinity, as defined by the City. There are no officially designated State scenic highways near the Project site or have views of the site.	No mitigation is required.	Less Than Significant
Threshold 4.1-c Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.	On-site and off-site construction activities of the proposed Project including infrastructure improvements, would be short term in nature and would have less than significant impacts. Future onsite development would change the visual quality of the project site, the buildings would be painted in neutral shades to blend with the desert landscape (e.g., shades of white and/or beige) and other site improvements such as asphalt pavement and retention ponds would be in shades of gray, black or brown. The proposed Project would not introduce a new viewshed to the area. Impacts would be less than significant.	No mitigation is required.	Less Than Significant
Threshold 4.1d Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	The Project would introduce new sources of light at the site, which would include security lights, building lights, and parking lot lights. The proposed buildings and site improvements would be constructed in compliance with applicable requirements. As such, the introduction of new light sources at the site would not adversely affect day or nighttime views in the area. It is noted that MM HAZ-2 in Section 4.9, Hazards and Hazardous Materials, of this EIR requires that proposed exterior lights shall be shielded and directed downwards to avoid impacts to aircraft operations in the area. The potential impacts of night lighting on wildlife is discussed in Section 4.4, Biological Resources, of this EIR and MM BIO-10 would reduce impacts on the behavioral patterns of nocturnal and crepuscular wildlife.	No mitigation is required.	Less Than Significant
Section 4.2 – Agriculture and Forest Resources			
Threshold 4.2a Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No lands in the City, including the Project site, are designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance.	No mitigation is required.	No Impact

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.2b Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	There are no agricultural uses on the site or in the adjacent areas. In addition, there are no Williamson Act contracts in or near the site or in the City.	No mitigation is required.	No Impact
Threshold 4.2c Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	The City does not have a zoning district for forest land or timberland. Also, no forests exist in or near the site or in the City.	No mitigation is required.	No Impact
Threshold 4.2d Would the project result in the loss of forest land or conversion of forest land to non-forest use?	No forest land is located in or near the site and no conversion of forest land to other uses would occur with the proposed Project.	No mitigation is required.	No Impact
Threshold 4.2e Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	No ongoing agricultural or forest operations occur on or near the site. Therefore, the Project and associated infrastructure improvements would have no impact on agricultural use or forest lands, nor would it lead to the conversion of agricultural land or forest land to other uses	No mitigation is required.	No Impact
Section 4.3 – Air Quality			
Threshold 4.3a Would the project conflict with or obstruct implementation of the applicable air quality plan?	The Project would not conflict with or obstruct implementation of the EKAPCD's attainment plans and would not result in significant impacts relative to consistency with EKACPD attainment plans. The Project would comply with RR AIR-1 through RR AIR-4. Impacts would be less than significant and no mitigation is required.	RR AIR-1 Construction activities will incorporate the dust control and vehicular control measures developed by the EKAPCD, which include, but is not limited to the following: Dust control measures to be implement during land preparation, excavation and/or demolition: 1. All soil excavated or graded should be sufficiently watered to prevent excessive dust. Watering should occur as needed with complete coverage of disturbed soil areas. Watering should be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations. 2. All clearing, grading, earthmoving and excavation activities should cease a. during periods of winds greater than 20 mph (averaged over one hour), if disturbed material is easily windblown, or b. when dust plumes of 20% or greater opacity impact public roads, occupied structures or neighboring property. 3. All fine material transported offsite should be either sufficiently watered or securely covered to prevent excessive dust. 4. If more than 5,000 cubic yards of fill material will be imported or exported from the site, then all haul trucks should be required to exit the site via an access point where a gravel pad or grizzly has been installed. 5. Areas disturbed by clearing, earthmoving or excavation activities should be minimized at all times. 6. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust. 7. Where acceptable to the fire department, weed control should be accomplished by mowing instead of discing, thereby, leaving the ground undisturbed and with a mulch covering.	Less Than Significant

Threshold of Significance	Project Impacts		Mitigation Program	Level of Significance After Mitigation
			Dust control practices for building construction, after clearing, grading, earth moving and/or excavation activities:	
			 Once initial leveling has ceased all inactive soil areas within the construction site should either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission. 	
			 All active disturbed soil areas should be sufficiently watered to prevent excessive dust, but no less than twice per day. 	
			Vehicular control measures to be implemented during all phases of construction:	
			DUST	
			10. Onsite vehicle speed should be limited to 15 mph.	
			 All areas with vehicle traffic should be paved, treated with dust palliatives, or watered a minimum of twice daily. 	
			12. Streets adjacent to the project site should be kept clean and accumulated silt removed.	
			13. Access to the site should be by means of an apron into the project from adjoining surfaced roadways. The apron should be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of the vehicles, a grizzly or other such device should be used on the road exiting the project, immediately prior to the pavement, in order to remove most of the soil material from the vehicle's tires.	
			TAILPIPE EMISSIONS	
			14. Properly maintain and tune all internal combustion engine powered equipment.	
			 Require employees and subcontractors to comply with California's idling restrictions for compression ignition engines. 	
			16. Use low sulfur (CARB) diesel fuel.	
		RR AIR-2	All equipment, appliances and mechanical and electrical systems shall comply with EKAPCD rules and regulations, which include, but are not limited to:	
			 Rule 106, Land Use, on EKAPCD's duty to review and advise planning authorities on all new construction nor changes in land use that could become a source of air pollution problems. 	
			 Rule 108.2, Emissions Statement Requirements, for persons owning or operating any source operation with the potential to emit oxides of nitrogen or reactive organic gases. 	
			 Rule 201, Permits, requiring an Authority to Construct and a Permit to Operate any new or modified equipment which may cause the issuance of air contaminants or eliminate, reduce or control air contaminants. 	
			 Rule 401, Visible Emissions, which prohibits discharges into the atmosphere that is as dark or darker than an established shade or obscures an observer's view like smoke. 	
			 Rule 402, Fugitive Dust, which requires the prevention, reduction or mitigation of anthropogenic fugitive dust emissions in an amount sufficient to attain and maintain NAAQS and CAAQS. 	
			 Rules 404.1 and 405, Particulate Matter Concentration, which requires particulate matter emissions to not exceed 0.1-grains per standard cubic foot of gas at standard conditions (gr/scf) and the allowable emissions based on process weight rate. 	
			 Rule 408, Disposal of Solids and Liquids, which sets requirements for incineration activities for the disposal of solids and liquids. 	

Threshold of Significance	Project Impacts		Mitigation Program	Level of Significance After Mitigation
			 Rule 409, Fuel-Burning Equipment – Combustion Contaminants, which regulates furnaces, boilers, apparatus, stack and appurtenances used in the process of burning fuel for producing heat or power by indirect heat transfer. 	
			 Rule 410.1A, Architectural Coatings, which limits the VOC emission from architectural coatings. 	
			 Rule 411, Storage of Organic Liquids, for equipment used to store organic liquids and petroleum distillates (e.g., kerosene, diesel, gas oil, stove oil, jet fuels, fuel oil, and asphalts) with a true vapor pressure of greater than 1.5 pounds per square inch above local atmospheric pressure. 	
			 Rule 419, Nuisance, prohibiting the discharge from any source of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, except for odors from agricultural operations. 	
			 Rule 422, New Stationary Sources, which sets standards, criteria and requirements for new stationary sources, as contained in Part 60, Chapter 1, Title 40 of the Code of Federal Regulations. 	
			 Rule 423, Hazardous Air Pollutants, which sets standards, criteria and requirements for hazardous air pollutants, as contained in Parts 61 and 63, Chapter 1, Title 40 of the Code of Federal Regulations. 	
		RR AIR-3	All construction activities will be conducted in compliance with Section 2485 of Title 113 of the California Code of Regulations, which requires that all diesel-fueled commercial motor vehicles must not idle for more than 5 consecutive minutes at any location.	
		RR AIR-4	The construction contractors and CFCC operators shall comply with applicable California Occupational Safety and Health regulations. These include, but are not limited to, regulations that would prevent the incidence of Valley Fever. Specifically, contractors and operators shall develop and implement an injury and illness prevention program that includes safe and healthy work practices, hazards at the worksite, training and retraining programs, periodic inspections for identifying and evaluation of unsafe conditions and workplace hazards, investigations and corrections of unsafe conditions, and other issues related to occupational safety and health. Engineering controls and/or the voluntary or required use of respiratory protective equipment to prevent harmful exposures to air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, including Valley Fever spores, shall be included in a respiratory protection program to the extent feasible. Contractors and operators shall record work-related fatalities, injuries and illnesses and shall report immediately to the California Division of Occupational Safety and Health any serious injury or illness, or death, of an employee.	
Threshold 4.3b	Project construction would result in exceedances of	Refer to RF	R AIR-1 and RR AIR-2, above.	Less Than Significant
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. the NO _x emissions thresholds for criteria pollutants adopted by the EKAPCD when measured by the maximum daily construction emissions. The Project would comply with RR AIR-1 and RR AIR-2. With the application of mitigation measures (MM AIR-1 and MM AIR-2), mitigated Project-related emissions would be less than significant Impacts would be significant prior to the implementation of mitigation measures.	adopted by the ENAPOD when measured by the	MM AIR-1	All offroad construction vehicles will comply with USEPA Tier 4 final engine standards which were enacted in 2015.	with Mitigation
	MM AIR-2	The application of architectural coatings will comply with the 10 grams/liter VOC limit as specified under super compliant coatings. This does not apply to the limited use of specialty coatings.		

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.3c Would the project expose sensitive receptors to substantial pollutant concentrations?	The Project would exceed the EKAPCD's daily significance thresholds for construction activities. With the implementation of the regulatory requirements (RR AIR-1, RR AIR-2 and RR AIR-3) and mitigation measure (MM AIR-1), less than significant air quality impacts would occur related to the potential exposure of sensitive receptors to substantial air pollutant concentrations.	Refer to RR AIR-1, RR AIR-2, and RR AIR-3, above. MM AIR-1 All offroad construction vehicles will comply with USEPA Tier 4 final engine standards which were enacted in 2015.	Less Than Significant with Mitigation
Threshold 4.3d Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Compliance with RR AIR-1, RR AIR-2 and RR AIR-4 would ensure that potential impacts associated with on-site construction workers' exposure to Valley Fever would be less than significant and no mitigation is required.	Refer to RR AIR-1, RR AIR-2, and RR AIR-4, above.	Less Than Significant
Section 4.4 – Biological Resources			
Threshold 4.4a Would the project 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 the CDFW or USFWS.	Special status plant and wildlife species found in the areas to be disturbed would be adversely affected by the Project. Impacts would be mitigated with implementation of mitigation measures MM BIO-1 through MM BIO-8. Indirect impacts would be mitigated with implementation of regulatory requirement RR HYD-1 and mitigation measures MM BIO-4 through MM BIO-12. Therefore, the potential impact on special status species would be less than significant with mitigation.	MM BIO-1 Nesting Birds/Raptors. To avoid impacts on active nests for common and special status birds and raptors, CoreCivic or its designee shall schedule vegetation clearing and blasting during the non-breeding season (i.e., September 16 to January 31) to the extent feasible. If Project timing requires that vegetation clearing and/or blasting occur between February 1 and September 15, CoreCivic or its designee shall retain a qualified Biologist to conduct a pre-construction survey for nesting birds and raptors. The pre-construction survey shall be conducted by a qualified Biologist within three days prior to vegetation clearing. The pre-construction nesting bird survey area shall include the Project impact area (i.e., disturbance footprint) plus a 250-foot buffer to search for nesting birds survey shall be expanded to include 500 feet from the blasting area. If no active nests are found, no further mitigation would be required. If an active nest is located in the pre-construction nesting bird survey area, the Biologist shall delineate an appropriate buffer to protect the nest based on the sensitivity of the species. A protective buffer of 500 feet shall be used to protect nesting raptors. If appropriate, a smaller buffer may be considered based on site topography, existing disturbance, sensitivity of the individuals (established by observing the individuals at the nest), and the type of construction activity. No construction activities shall be allowed in the designated buffer until the Biologist determines that nesting activity has ceased (i.e., fledglings have left the nest or the nest has failed). The designated buffer will be clearly marked in the field and will be mapped as Environmentally Sensitive Areas (ESAs) on construction plans. The Worker Environmental Awareness Program (WEAP) training shall include information on active nests and protective buffers. Prior to the initiation of construction activities, an email summary of the results shall be submitted to the City with a map of any active nests f	Less Than Significant with Mitigation

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		species. To the greatest extent practicable, efforts shall be made to avoid any special status plant species population that is observed.	
		If avoidance is not feasible, the following measures shall be followed:	
		CRPR 1B and 2B Plants. If plants with a California Rare Plant Rank (CRPR) of 1B or 2B are observed in the impact area and cannot be avoided, the determination of significance will be based on the size of the impacted population relative to the regional population size. The regional population size will be determined based on the current total population sizes (excluding occurrences considered extirpated) of California Natural Diversity Database (CNDDB) and Consortium of California Herbaria (CCH) records from the U.S. Geological Survey (USGS) Boron, Boron NW, California City North, California City South, Cantil, Galileo Hill, Johannesburg, Mojave NE, North Edwards, Saltdale SE, and Sanborn 7.5-minute quadrangles. If the impacted population of CRPR 1B or 2B species represents less than five percent of the regional population, the impact will be considered less than significant and no mitigation will be required. If the impacted population of CRPR 1B or 2B species represents five percent or more of the regional population, compensatory mitigation shall be required. Mitigation ratios (i.e., the amount of mitigation required compared to the amount of impact) shall be no less than 1:1, replacing impacted resources with resources of equivalent or higher quality habitat value. CoreCivic shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Mitigation Plan for approval by California City. The mitigation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, (4) implementation schedule, (5) maintenance plan/guidelines, (6) monitoring plan, (7) long-term preservation. CoreCivic shall implement the Plan as approved.	
		CRPR 3 and 4 Plants. If plants with a CRPR of 3 or 4 are observed in the impact area and cannot be avoided, the determination of significance will be based on the size of the impacted population relative to the regional population size. The regional population size will be determined based on the current total population sizes (excluding occurrences considered extirpated) of CNDDB and CCH records from the USGS Boron, Boron NW, California City North, California City South, Cantil, Galileo Hill, Johannesburg, Mojave NE, North Edwards, Saltdale SE, and Sanborn 7.5-minute quadrangles. If the impacted population of CRPR 3 or 4 species represents less than 20 percent of the regional population, the impact will be considered less than significant and no mitigation will be required If the impacted population of CRPR 3 or 4 species represents 20 percent or more of the regional population, compensatory mitigation shall be required. Mitigation ratios (i.e., the amount of mitigation required compared to the amount of impact) shall be no less than 1:1, replacing impacted resources with resources of equivalent or higher quality habitat value. CoreCivic shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Mitigation Plan for approval by California City. The mitigation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, (4) implementation schedule, (5) maintenance plan/guidelines, (6) monitoring plan, and (7) long-term preservation. CoreCivic shall implement the Plan as approved.	
	ММ	BIO-3 California Desert Native Plant Harvesting Permits. Prior to the initiation of construction, the CoreCivic shall obtain the necessary permits, tags, and/or seals, and shall pay the appropriate fees for removal of any individuals of a species protected by the California Desert Native Plant Protection Act. This includes nine California barrel cactus, two cottontop cactus, and eight silver cholla.	
	мм	BIO-4 Take Permits. Prior to the issuance of grading or building permits, CoreCivic shall provide a Section 10 Incidental Take Permit from the U.S. Fish and Wildlife Service (USFWS) for desert tortoise and a Section 2081 Incidental Take Permit from the CDFW for desert tortoise and Mohave ground squirrel. Compensatory mitigation for impacts on desert tortoise and Mohave ground squirrel are described in MM BIO-5. If Crotch bumble bee, a State Candidate species, is listed as State Endangered, the Section 2081 Incidental Take Permit shall also include this species.	
	ММ	BIO-5 Compensatory Mitigation. CoreCivic or its designee shall provide compensatory mitigation for directly impacting 216.45 acres of habitat for desert tortoise and 221.27 acres of habitat for Mohave ground squirrel. If Crotch bumble bee, a State Candidate species, is listed as State Endangered, this mitigation shall also compensate for impacting 221.27 acres of habitat of this species. The goal of this mitigation is to	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		ensure no net loss of habitat following implementation of the Project. Mitigation ratios (i.e., the amount of mitigation acreage compared to the amount of impacted habitat) shall be negotiated with the resource agencies but shall be no less than 1:1, replacing each acre of habitat lost with of an acre of equivalent or higher quality habitat. This mitigation may be in the form of habitat preservation, restoration, enhancement, and/or establishment (i.e., creation), discussed below. CoreCivic shall implement one or a combination of these options, as approved by USFWS and CDFW in permits described in MM BIO-4.	
		 Preservation consists of acquisition of mitigation lands containing viable occurrences of the species, or that enhance the sustainability of the occurrences by protecting buffer lands and protecting those occurrences in perpetuity under a conservation easement or an in-lieu fee program that is transferred to a qualified land trust or public agency. 	
		 Restoration consists of the re-establishment or rehabilitation of mitigation land with the goal of returning natural or historic functions and characteristics. Restoration may result in a gain in habitat function, acreage, or both. 	
		 Enhancement consists of activities that heighten, intensify, or improve one or more habitat functions. Enhancement results in a gain in habitat function but does not result in a net gain in habitat acreage. 	
		 Establishment consists of the development of habitat in an area where it did not previously exist through manipulation of the physical, chemical, and/or biological characteristics of the site. 	
		Compensatory mitigation may be in the form of permittee-responsible mitigation, in which the permittee maintains liability for the construction and long-term success of the mitigation site or through mitigation banking/in-lieu fee program, where liability for Project success is transferred to a third party (i.e., a mitigation bank/in-lieu fee sponsor). If CoreCivic elects to provide mitigation through mitigation banking/in-lieu fee program, the mitigation bank/program shall be selected by CoreCivic and approved by the resource agencies and payment shall be made prior to the issuance of grading or building permits.	
		For permittee-responsible mitigation involving establishment, restoration, or enhancement of habitat, CoreCivic shall retain a qualified Biologist to prepare a Habitat Mitigation Monitoring Plan (HMMP) to mitigate for loss of desert tortoise and Mohave ground squirrel habitat. The HMMP shall be reviewed/approved by the USFWS and CDFW prior to issuance of grading or building permits. The detailed HMMP shall contain the following items:	
		 Responsibilities and Qualifications of the Personnel to Implement and Supervise the Plan. The responsibilities of CoreCivic or its designee, specialists, and maintenance personnel, as well as the qualifications of specialists and maintenance personnel that will supervise and implement the plan, will be specified. 	
		 Site Selection. Site selection for restoration, establishment, enhancement, and/or preservation mitigation shall be determined in coordination with CoreCivic, or its designee, and resource agencies. The mitigation site(s) shall be located in a dedicated open space area or on land that shall be dedicated and/or purchased off site. 	
		3. Site Preparation and Planting Implementation. Site preparation shall include the following, as determined by specific site conditions and permit requirements: protection of existing native species, trash and weed removal, native species salvage and reuse (i.e., duff), soil treatments (i.e., imprinting, decompacting), temporary irrigation installation, erosion-control measures (i.e., rice or willow wattles), seed mix application, and container species.	
		 Schedule. A schedule that requires planting to occur between October 1 and March 1 shall be developed. 	
		 Maintenance Plan/Guidelines. The maintenance plan shall include the following, as determined by specific site conditions and permit requirements: weed control, herbivory control, trash removal, irrigation system maintenance, maintenance training, and replacement planting. 	
		6. Monitoring Plan. The site shall be monitored and maintained for a minimum of five years to ensure successful establishment of riparian habitat within the restored and created areas. The monitoring plan shall include qualitative monitoring (i.e., photographs and general observations); quantitative	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		monitoring (e.g., randomly placed transects); performance criteria, as approved by the resource agencies; and monthly reports for the first year with quarterly reports thereafter and annual reports for all five years.	
		 Long-Term Preservation. Long-term preservation of the site shall be outlined in the restoration and enhancement plan to ensure the mitigation site is not impacted by future development. 	
		Although monitoring plans are typically scheduled to last five years, if coverage is successful prior to five years, CoreCivic or its designee may request to be released from monitoring requirements by the USFWS and CDFW.	
	мм	BIO-6 Avoidance and Minimization Measures to Avoid Take.	
		6A. Biological Monitor. Prior to the initiation of construction activities, CoreCivic shall retain a qualified Biologist to oversee compliance with the protection measures for desert tortoise, Mohave ground squirrel, and other special status species. The Biologist shall monitor all fence installation, vegetation clearance, and ground-disturbance activities throughout the construction phase. The Biologist shall have the authority to halt activities that are in violation of measures designated to protect the desert tortoise, Mohave ground squirrel, or other special status species. Work shall proceed only after hazards to desert tortoise, Mohave ground squirrel, and/or other special status species are removed and the species are no longer at risk. The Biologist shall have in his/her possession a copy of all the compliance measures and permits while work is being conducted on site.	
		6B. Worker Environmental Awareness Program Training. Prior to the initiation of construction activities, and for the duration of construction activities, all new construction workers for the Project shall attend a Construction Worker Environmental Awareness Program (WEAP) training developed and presented by a qualified Biologist. The training shall address desert tortoise and Mohave ground squirrel, as well as other special status biological resources that may be encountered during construction activities; their legal protections; the definition of "take" under the Endangered Species Act; specific measures that each worker shall employ to avoid take of the desert tortoise, Mohave ground squirrel, Crotch bumble bee, and other special status species; reporting requirements; and penalties for violation of the Federal and State Endangered Species Acts. A fact sheet conveying this information shall be distributed to all workers. All workers who attend the WEAP training shall sign a training log, which will also be signed by the qualified Biologist conducting the training. The WEAP training logs shall be submitted with Project construction monitoring reports.	
		6C. Protective Fencing. Prior to the issuance of grading or building permits, CoreCivic or its designee shall ensure that the entire Project site is enclosed with permanent or temporary desert tortoise exclusion fencing meeting current USFWS specifications. During construction of the utility alignment, temporary exclusion fencing shall be installed between the active work area and adjacent habitat, if suitable habitat is adjacent. All construction-related activities, including staging areas, equipment access, and disposal or temporary placement of spoils, shall be located within exclusion fencing.	
		Permanent Fencing: The fencing type shall include 1-inch by 2-inch vertical mesh galvanized fence material, extending at least 2 feet above the ground and buried at least 1 foot under the ground surface. Where burial is impossible, the mesh shall be bent at a right angle toward the outside of the fence and covered with dirt, rocks, or gravel to prevent desert tortoise from digging under the fence.	
		<u>Tortoise Guards</u> : Tortoise guards shall be installed at all site entry points; the tortoise guards shall be engineered so that an escape route is accessible for tortoises on each side of the guard. Additionally, tortoise guards shall drain properly following rain; water should not pond in the bottom of the tortoise guard.	
		<u>Temporary Fencing</u> : Temporary fencing shall extend at least 2 feet above the ground and shall be buried at least 1 foot under the ground surface. Supporting stakes shall be sufficiently spaced to maintain fence integrity with at least one every 10 feet. Temporary fencing shall be replaced when the integrity of the fencing is no longer reliable.	
		Monitoring: A qualified Biologist shall monitor construction of the permanent fence and/or installation of temporary fencing to ensure no desert tortoise are impacted by construction of the fence. A qualified	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		Biologist shall inspect all fencing (including existing exclusion fencing at the WWTP when active construction is occurring there) on a weekly basis throughout construction and following any large weather events that may have damaged the fence. The Biologist shall report any damaged sections of the fence to the construction contractor and CoreCivic or its designee so that the fence can be repaired immediately (i.e., within 24 hours). If possible, the Biologist should attempt to temporarily fix the fence or block any opening to prevent tortoise from entering prior to the fence repair by the construction contractor. Sand, soil, plant material, or other debris that builds up against the fence shall be cleared regularly to ensure the fence can be properly inspected by the Biologist and to ensure that it continues to provide adequate exclusion of desert tortoise.	
		During operation of the Project, the permanent exclusion fence shall be monitored monthly and following any large weather events that may have damaged the fence. Any damage shall be reported and repaired within 48 hours and all repair activities must be monitored by a qualified Biologist. Sand, soil, plant material, or other debris that builds up against the fence shall be cleared regularly to ensure the fence can be properly inspected and to ensure that it continues to provide adequate exclusion of desert tortoise. All instances of substantial damage to the fencing shall be reported in the Annual Report to USFWS. If the qualified Biologist determines that the fence damage was sufficient for desert tortoise to pass through, then the Biologist will conduct a survey of the area between the exclusion fencing and the security fencing to confirm no desert tortoise are located within the repaired fence. If the Biologist discovers desert tortoise within the fence line, then an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise), will translocate it outside the fencing per the Desert Tortoise Relocation Plan. 6D. Staging/Access. All construction on the Project site, including the impact area (i.e., disturbance footprint), staging areas, access, and disposal or temporary placement of spoils, shall occur within the Project site boundaries. All construction on the utility alignment, including the impact area (i.e., disturbance footprint), staging areas, access, and disposal or temporary placement of spoils, shall occur within the existing disturbed footprint of the road (i.e., paved and/or graded areas); construction of the	
		utility alignment shall not impact adjacent habitat areas. All construction at the WWTP, including staging areas, access, and disposal or temporary placement of spoils, shall occur within the impact area (i.e., the disturbance footprint). Project-related vehicles shall observe a daytime speed limit of 20 mph, except on City/county roads and state and federal highways. If night-time construction occurs, the speed limit shall be reduced to 10 mph. During operation of the Project, no vehicles should be operated on non-paved roads beyond the desert tortoise exclusion fencing. If vehicles or equipment need to operate beyond the fencing, all vehicles shall observe a daytime speed limit of 20 mph. The same speed limits shall also be observed on any off-site mitigation properties.	
		6E. Clearance Surveys. Prior to any vegetation removal or grading but following installation of protective fencing on the Project site, CoreCivic shall retain a qualified Biologist to perform a desert tortoise clearance survey within the fenced area following current USFWS protocol. The survey will be overseen by a Lead Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) who may be assisted by qualified Biological Monitors under the supervision of the Authorized Biologist. A minimum of two clearance passes shall be completed during the tortoise's active period from late March through May or September to October. Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) to a location outside the Project site using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107 °F (42 degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures. No tortoises shall be translocated between mid-April and early October unless ambient temperatures are favorable. If the schedule of construction requires that clearance surveys continue past the safe time to translocate tortoises (i.e., past early April), then continued searches for tortoises would include temporarily affixing found tortoises with transmitters for ease of refinding them and translocating them during autumn at a safe time for translocation. Once the Project site is deemed free of desert tortoises after two consecutive clearance passes and excavation of all potential burrows, then heavy equipment shall be allowed to enter the Project site to perform construction activities. Following completion of the clearance survey, a Letter Report shall be prepared by the Biologist to document the methods and results of the clearance survey, the capture and release locations of all tortoises found, individual torto	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		data. The report shall be submitted to the USFWS and CDFW within 30 days of completion of the clearance survey.	
		Prior to blasting, a qualified Biologist shall conduct a pre-construction survey of the indirect impact area (i.e., within 200 feet of the blasting area). Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) more than 500 feet from the blasting area using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107°F (42degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures. Any burrows within 200 feet of the blasting area shall be excavated using standard techniques approved by the USFWS and CDFW.	
		During construction of the utility alignment, a qualified Biologist shall conduct a pre-construction clearance sweep of the active work area within temporary exclusion fencing prior to the initiation of work each day. Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) to a location outside the active work area using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107°F (42 degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures.	
		In the unlikely event that a tortoise is found in the work area during Project operations, the tortoise shall be captured by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise); boxed in a clean, escape-proof box; and temporarily maintained in a cool, quiet, safe location until the Authorized Biologist can remove it from the site, within no more than one day. The capture location will be recorded. If ambient temperatures exceed lethal levels on a daily basis, the Authorized Biologist shall consult with the USFWS and CDFW prior to transporting the tortoise off site.	
		6F. Vehicle Clearance. For the duration of construction activities, CoreCivic shall ensure that vehicle parking and storage shall occur within the desert tortoise exclusion fencing. Prior to moving any vehicles within the Project site or WWTP or vehicles associated with construction along the utility alignment, the worker shall inspect the ground under the vehicle for the presence of desert tortoise before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If it does not move within three hours, an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) shall remove and relocate the animal to a safe location outside the Project site or outside the utility alignment work area per the Desert Tortoise Relocation Plan.	
		During operation of the Project, no vehicles or equipment should be operated on non-paved roads beyond the desert tortoise exclusion fencing. If vehicles or equipment need to operate beyond the fencing, each driver or operator shall inspect the ground under the vehicle for the presence of desert tortoise before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If it does not move within three hours, an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) shall remove and relocate the animal to a safe location outside the Project site or outside the utility alignment work area per the Desert Tortoise Relocation Plan.	
		6G. Work Hours. Work shall occur only during daylight hours unless otherwise approved by the USFWS and CDFW.	
		6H. Entrapment. At the end of each work day, a qualified Biologist shall survey all trenches, bores, and other excavations to ensure no wildlife are trapped; any wildlife observed shall be relocated to a safe area. Only an Authorized Biologist shall handle desert tortoise and/or Mohave ground squirrel (i.e., one approved by both USFWS and CDFW to handle desert tortoise and/or approved by CDFW to handle Mohave ground squirrel). Following this final inspection, the Biologist shall ensure that the construction contractor has backfilled or adequately covered all trenches, bores, and other excavations to prevent wildlife from falling into them. If backfilling or covering the trenches, bores, and/or excavations is not feasible, then wildlife escape ramps shall be provided at least every 50 feet. Additionally, any pipes, culvert, or similar structures shall be inspected before the material is moved, buried, or installed.	
		6I. Raven Management. CoreCivic shall retain a qualified Biologist to prepare a Common Raven Management Plan in accordance with USFWS guidelines to describe management measures for common	

Threshold of Significance	Project Impacts		Mitigation Program	Level of Significance After Mitigation
			raven during construction and operation of the Project. CoreCivic or its designee shall ensure the plan is implemented. Measures shall include design considerations for structures to eliminate structures that could be used as perches for hunting; management of trash, roadkill, and ponded water so as not to attract common raven to the Project site, and the use of deterrents to discourage nesting by common raven, During construction, water used for dust abatement shall be minimized to prevent the formation of puddles that could attract predators of the desert tortoise to the area. During operation and maintenance, project-related water runoff will be properly managed to not result in puddles outside the designated retention basins. During construction and operation, trash shall be contained in closed containers and removed daily to avoid attracting predators to the area.	
			6J. Pets. CoreCivic or its designee shall ensure that no pets are allowed at the construction site or outside the exclusion fencing during operation.	
			6K. Protection of Wildlife. Wildlife shall not be intentionally killed or injured on the Project site, along the utility alignment, at the WWTP, or in the surrounding area during construction or operation.	
			6L. Pesticides. The use of rodenticides and herbicides on the Project site or in surrounding areas shall be restricted. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, the California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.	
			6M. Reporting. For the duration of construction activities, the Biologist shall complete daily monitoring forms that shall be summarized into monthly monitoring reports, which shall be provided to the USFWS and CDFW. The monthly monitoring reports shall document compliance with the mitigation measures and shall include WEAP training logs, weekly fence inspection forms, and California Natural Diversity Database forms for any special status species observations. Additionally, the Biologist shall prepare a final report summarizing compliance throughout Project construction and documenting the level of take associated the Project.	
		MM BIO-7	Burrowing Owl. Per the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG 2012), CoreCivic shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl no less than 14 days prior to any ground disturbance by the Project and no greater than 30 days prior to ground disturbance in each Project area. The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available).	
			If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in CDFG 2012. This includes any active burrows within 200 feet of the blasting area (if blasting is required). One-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied, as verified by site monitoring and scoping by a desert tortoise Authorized Biologist, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools. Prior to excluding an owl from an active burrow, a receptor burrow survey shall be conducted to confirm that at least two potentially suitable unoccupied burrows are within approximately 688 feet prior to installation of the one-way door. If two natural receptor burrows are not located, one artificial burrow shall be created for every burrow that would be closed.	
			If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year (see Table below). The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. The WEAP training shall include information on the protective buffer. CoreCivic or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.	
			If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on CDFW guidelines. The	

Threshold of Significance	Project Impacts			Mitigatio	on Program			Level of Significance After Mitigation
			The designated but plans. The WEAP contact CDFW to occupied burrows. that all fledglings h	from 650 to 1,640 feet deponder will be clearly marked training shall include inform determine whether a reduct. Construction shall be allownave left the nest. Compensementation of MM BIO-6. BURROWING OWL	in the field and wi mation on the prot ed buffer can be a wed to proceed wl satory mitigation f	Il be mapped as an ective buffer. Core accommodated wit hen the qualified B or the loss of forag	n ESA on construction Civic or its designee shall hout adversely impacting iologist has determined	
						Level of Disturba	nce	
				Time of Year	Low	Medium	High	
			Nesting sites	April 1 to August 15	656 feet (200 meters)	1,640 feet (500 meters)	1,640 feet (500 meters)	
			Nesting sites	August 16 to October 15	656 feet (200 meters)	656 feet (200 meters)	1,640 feet (500 meters)	
			Nesting sites	October 16 to March 31	164 feet (50 meters)	328 feet (100 meters)	1,640 feet (500 meters)	
			submitted to CDF\ effort. If an active that has been desi If time lapses of gr additional survey s	of the pre-construction burn W documenting the results burrow is observed, the Lei ignated and a summary of reater than 30 days occur of shall be conducted by a quaturbance in that area. If any plied.	of the survey with tter Report shall ir any additional cor during construction alified Biologist wi	nin two weeks of conclude a description respondence with a particular pothin 24 hours prior	ompletion of the survey n of the protective buffer the CDFW. rtion of the work area, an to vegetation clearing	
		мм вю-8	construction burro 30 days prior to ini conducted prior to necessary. The pri	merican Badger Burrows. w survey for desert kit fox a itiation of ground disturband the initiation of the breedir e-construction survey shall tive burrows are found, no	and American bac ce/construction ac ng season (i.e., Fe include the Proje	lger no less than 1 ctivities. Ideally, thi ebruary 1) to allow ct site plus a 200-1	4 days and no more than s survey shall be for passive exclusion, if oot buffer (if access is	
			be avoided, the bu 200 feet of the bla badgers from their shall be used to di not used for five ni	v is observed outside the brurrow shall be closed using sting area (if blasting is required by burrows; doors shall be lescourage use by desert kit ights), as verified by site mow shall be closed by a quant	passive exclusion quired). One-way of ft in place for at le fox. Once the bur onitoring and sco	n. This includes an doors shall be used east five nights. Pro rrow is determined ping by a desert to	y active burrows within d to exclude American ogressive soil blocking to be unoccupied (i.e., rtoise Authorized	
			avoided, a 50-foot clearly marked in t include information	vis observed outside the brown protective buffer shall be of the field and will be mapped on the protective buffer. Or a reduced buffer can be a	delineated around d as an ESA on co CoreCivic or its de	the burrow. The donstruction plans. signee shall const	esignated buffer will be The WEAP training shall alt with CDFW to	
			shall be protected	observed during the breedi with a 100-foot buffer until the field and will be mapped	breeding activity	has ended. The de	esignated buffer will be	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		include information on the protective buffer. CoreCivic or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting the occupied den. Construction shall be allowed to proceed when the qualified Biologist has determined that the burrow is no longer active based on site monitoring (i.e., no activity has been observed at the burrow for five nights).	
		Upon completion of the pre-construction burrow survey, a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey within two weeks of completing the survey effort. If an active burrow/den is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any additional correspondence with the CDFW.	
		MM BIO-9 Best Management Practices. CoreCivic or its designee shall incorporate Best Management Practices (BMPs), including applicable measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged by proposed Project activities does not adversely affect the Project area. In particular, BMPs shall be designed to prevent (to the extent feasible) the runoff of toxins, chemicals, petroleum products, or other elements that might degrade water quality. Additionally, BMPs shall be used to minimize erosion.	
		The areas where stockpiling can occur shall be selected in consultation with the monitoring Biologist. Spoils shall be stockpiled in disturbed areas lacking native vegetation. The construction contractor shall clearly mark stockpile areas to define the limits where stockpiling can occur.	
		The construction contractor shall designate an area for vehicle maintenance that is not within or adjacent to drainages or native vegetation. Fueling and maintenance of equipment shall take place within the vehicle maintenance area. Impervious ground surfaces or plastic covering shall be used to prevent spillage or leakage onto the ground surface. Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.	
		MM BIO-10 Night Lighting. CoreCivic or its designee shall ensure that night lighting shall be directed away from open space areas and shielding shall be incorporated in the final Project design to minimize spillover of night lighting into adjacent open space to the greatest extent practicable. Any such light fixtures installed adjacent to open space areas shall direct/reflect light downward and away from adjacent habitat areas.	
		MM BIO-11 Landscaping. CoreCivic or its designee shall retain a qualified Biologist to review the landscaping plan to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the surrounding natural open space. A list of potential landscaping plant species shall be submitted to the Biologist for review; the Biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) are not included on the list. The Biologist shall make recommendations for more suitable plant species if necessary. Once a final plant palette is prepared, landscaping installed in the development area shall include only species on the approved palette.	
		MM BIO-12 Prevention of the Spread of Weed Seeds. The introduction of exotic plant species shall be avoided and minimized to the extent practicable. Weed seeds entering the construction area via vehicles shall be minimized by requiring construction vehicles to be washed prior to delivery to the Project site. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting construction areas on vehicles. Additionally, wattles used for erosion control shall be certified as weed-free.	
		Refer to RR HYD-1 and RR GEO-2, below.	
Threshold 4.4b Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	Off-site impacts at the WWTP may result in potential impacts on jurisdictional waters. Implementation of MM BIO-13 would reduce potentially significant impacts to wetlands and riparian communities to less than significant levels.	MM BIO-13 Jurisdictional Permits. Prior to any impacts on waters under the regulatory authority of the Regional Water Quality Control Board (RWQCB) or the CDFW, CoreCivic, or its designee, shall prepare and process an RWQCB Report of Waste Discharge and a CDFW Section 1602 Notification of Lake or Streambed Alteration, as applicable. Notification of Project activities at the WWTP shall be submitted to the CDFW in order to ascertain whether modification of existing wastewater ponds is subject to CDFW jurisdiction. As part of the permitting process, it is recommended that CoreCivic, or its designee, schedule a pre-application meeting with RWQCB and CDFW staff to discuss site conditions, the Project, biological and jurisdictional resources, impacts to jurisdictional resources resulting from implementation of the Project, proposed avoidance and	Less Than Significant with Mitigation

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.4c Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.		minimization measures, the proposed compensatory mitigation program to offset Project impacts, and the regulatory permit process. The USFWS may also be involved in the pre-application field meeting to discuss species impacts (MM BIO-4). Once the RWQCB and CDFW permits have been obtained, they shall be submitted to the City prior to any ground-disturbing activities.	
nydrological interruption, or other means.		CoreCivic shall implement and comply with all measures required by the RWQCB and CDFW permits. Compensatory mitigation may include restoration (i.e., re-establishment or rehabilitation), establishment (i.e., creation), enhancement, and/or preservation of jurisdictional resources. Compensatory mitigation may occur through permittee-responsible mitigation, payment to an in-lieu fee program, or purchase of compensatory mitigation credits from an approved mitigation bank. Mitigation ratios (i.e., the amount of mitigation acreage compared to the amount of impacted habitat) shall be negotiated with the regulatory agencies, but shall be no less than 1:1, replacing impacted jurisdictional resources with jurisdictional resources of equivalent or higher quality habitat value. It should be noted that mitigation for impacts on jurisdictional resources can be a subset of compensatory mitigation provided for special status species habitat (MM BIO-5).	
Threshold 4.4d Would the project 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?	The project site is not located within an established regional wildlife movement corridor and impacts on wildlife movement would be less than significant.	No mitigation is required.	Less Than Significant
Threshold 4.4e Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	The Project site and WWTP do not support trees protected by the City's tree ordinance and no trees would be removed by the Project. Therefore, there would be no conflict with any local policies or ordinances protecting biological resources.	No mitigation is required.	No Impact
Threshold 4.4f Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	The Project is consistent with the goals and strategies of the West Mojave Plan. No conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan would occur with the Project.	No mitigation is required.	No Impact
Section 4.5 – Cultural Resources			
Threshold 4.5a Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	The Project site is undeveloped; there are no structures or site improvements that may be considered historical resources that would be disturbed or demolished by the Project. The site is not listed in the NRHP, CRHR, or other local register as a historical site. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant
Threshold 4.5b Would the project cause a substantial adverse change to the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	No archaeological resources were discovered either on site or along the offsite utility corridor alignment as a result of the archaeological field survey. Implementation of MM CUL-1 would reduce the potential for the destruction of any significant archaeological resources. Impacts would be less than significant after mitigation.	MM CUL-1 The Project Applicant/Developer shall retain a professional archaeologist prior to the issuance of grading permits. The task of the archaeologist shall be to monitor the initial ground-altering activities at the site and off-site utility corridor alignment for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of California City and no grading activities shall occur at the site or within the off-site utility corridor alignment until the archaeologist has been approved by the City. The archaeological monitor shall be responsible for maintaining daily field notes and a photographic record, and for reporting all finds to the Developer and the City in a timely manner. The archaeologist shall be equipped to record and salvage cultural resources that may be unearthed during grading activities. The archaeologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.	Less Than Significant with Mitigation

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		In the event that archaeological resources are discovered at the Project site or within the off-site utility corridor alignment, the handling of the discovered resources shall depend on the integrity of the discovery and the type of resources (e.g. cultural middens, intact features, isolated artifacts) discovered. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred/ceremonial objects, belong to the property owner. All artifacts discovered shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project archaeologist shall notify the property owner, the City, and tribes identified by the California Native American Heritage Commission (NAHC) as being affiliated with the area. A designated Native American observer from one of the tribes identified by the NAHC as being affiliated with the area shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of Section 106 and CEOA and shall consider the religious beliefs, customs, and practices of the affiliated tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling. Native American artifacts that are relocated/ reburied at the Project site would be subject to a fully executed relocation/reburial agreement with the assisting Native American tribes or bands. This shall include measures and provisions to protect the reburial area from any future impacts. Relocation/reburial shall not occur until all cataloging and basic recordation have been completed. Native American artifacts that cannot be avoid	
Threshold 4.5c Would the project disturb any human remains, including those interred outside of formal cemeteries?	There is no indication that human remains are present within the Project site and utility corridor alignment. The records search and field survey indicate no evidence of human remains on or near the site or associated off-site utility corridor alignment. Project-related earth disturbance, however, may unearth previously undiscovered human remains. Compliance with RR CUL-1 would ensure that impacts on human remains would be less than significant.	RR CUL-1 The California Health & Safety Code Section 7050.5 and federal regulations (Archaeological Resources Protection Act [ARPA] 16 USC 470 & 43 CFR 7, Native American Graves Protection & Repatriation Act [NAGPRA] 25 USC 3001 & 43 CFR 10 and Public Lands, Interior 43 CFR 8365.1-7) establish defined protocols if human remains are discovered in the state of California regardless if the remains are modern or archaeological in origin. In the event of the discovery of human remains, all work in the area must cease immediately, nothing shall be disturbed and the area shall be secured. The County Coroner's Office of the county where the remains were located must be called. The Coroner has two working days to examine the remains, in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner's Office determines the remains are of modern origin, the appropriate law enforcement officials shall be called by the Coroner to conduct the required procedures. Work shall not resume until law enforcement has released the area. On federal lands, if the Coroner determines the remains are archaeological or historic in origin, the federal agency archaeologist shall be notified. The archaeologist shall initiate the proper procedures under ARPA and/or NAGPRA. If the remains can be determined to be Native American, the steps as outlined in NAGPRA, 43 CFR 10.6 Inadvertent Discoveries, shall be followed.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		On non-federal lands, if the Coroner determines the remains are archaeological or historic in origin, the Coroner shall make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American he/she shall contact by telephone within 24 hours, the California Native American Heritage Commission (NAHC). The NAHC shall immediately notify the person it believes to be the most likely descendant of the remains (MLD), as required by Section 5097.98 of the California Public Resources Code. The MLD has 48 hours to make recommendations to the land owner for treatment or disposition of the human remains. If the MLD does not make recommendations within 48 hours, the land owner shall rebury the remains in an area of the property secure from further disturbance. If the land owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC. No mitigation is required.	
2		The miligation is required.	
Threshold 4.6a Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	The project would result in energy consumption. RR AIR-3 would reduce fuel use by construction vehicles and equipment and compliance with RR UTL-3 would indirectly reduce energy use from the production of building materials and the transport/disposal of solid wastes. Impacts would be less than significant and no mitigation is required.	Refer to RR AIR-3 , above and RR UTL-3 , below No mitigation is required.	Less Than Significant
Threshold 4.6b Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	The Project would not use construction equipment that would be less energy-efficient than comparable equipment at construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards, as detailed in California's Title 24 building standards. Compliance with RR UTL-1 and RR UTL-3 would also indirectly reduce energy. Thus, energy use during construction of the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant and no mitigation is required.	Refer to RR UTL-1, and RR UTL-3, below. No mitigation is required.	Less Than Significant
Section 4.7 – Geology and Soils			
Threshold 4.7a Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Hazard Fault Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (ii) strong seismic ground shaking; (iii) seismic-related ground failure, including liquefaction; or (iv) landslides.	The project site is not included in an Alquist-Priolo Earthquake Fault Zone and there are no known active or potentially active faults traversing the site. Impacts associated with surface fault rupture are less than significant for the proposed Project. The project site is in a seismically active area that would likely experience strong ground shaking during the life of any developed Compliance with regulatory requirements RR GEO-1 and RR GEO-2 would minimize hazards associated with seismic activity. Impacts would be less than significant and no mitigation is required.	RR GEO-1 The proposed Project will be designed and constructed in accordance with the California City Building Code, which adopts the California Building Code (CBC) by reference. New construction, alteration, or rehabilitation shall comply with applicable ordinances set forth by the City and/or by the most recent building and seismic codes in effect at the time of project design. RR GEO-2 In accordance with Section 1803.1 et seq. of the 2016 CBC, a geotechnical investigation shall be conducted for the Project to determine the soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary and as determined by the City Building Official. Subsurface geotechnical exploration and laboratory testing shall be performed as part of the geotechnical investigation to develop site-specific geotechnical design recommendations for the Project. The geotechnical investigation must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations of the report, as they pertain to structural design and construction recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic considerations, must be incorporated into the design and construction of the Project.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
		No mitigation is required.	
Threshold 4.7b Would the project result in substantial soil erosion or the loss of topsoil.	Construction activities may result in wind and water erosion of bare soils. implementation of RR HYD-1 and RR AIR-1 would prevent construction activities from resulting in significant adverse impacts associated with substantial soil erosion and/or loss of topsoil. Impacts relating to erosion would be less than significant and no mitigation is required.	Refer to RR AIR-1, above and RR HYD-1, below No mitigation is required.	Less Than Significant
Threshold 4.7c Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	the site is relatively flat, and there are no landslide hazards on or near the site. Also, there is a remote potential for liquefaction due to the shallow depths of bedrock and the absence of perched groundwater. Implementation of RR GEO-1, RR GEO-2, RR GEO-3, and RR NOI-2 would reduce geologic hazards. Impacts would be less than significant and no mitigation is required.	Refer to RR GEO-1, RR GEO-2, above and RR NOI-2, below RR GEO-3 In accordance with the California City Fire Code, the transportation, manufacture, storage, handling, sale or use of any quantity of explosives, explosive materials, and blasting agents shall be in accordance with pertinent provisions of California Fire Code, which the City Municipal Code adopts by reference.	Less Than Significant
Threshold 4.7d Would the project be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	The geotechnical investigation for the CAC identified the presence of expansive soils, as well as corrosive to moderately corrosive soils, at an adjacent site. Impacts associated with expansive soils would be less than significant with compliance of RR GEO-1 and RR GEO-2.	Refer to RR GEO-1 and RR GEO-2, above. No mitigation is required.	Less Than Significant
Threshold 4.7e Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	The Project does not propose septic tanks or alternative wastewater disposal systems at the site or at off-site locations. No impacts would occur and no mitigation is required.	No mitigation is required.	No Impact
Threshold 4.7f Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	No paleontological resources were discovered the Project field survey. However, the subsurface disturbance necessary for construction of the proposed Project, including grading to as deep as 40 feet below the ground surface, could result in impacts to Older Alluvial sediments. Implementation of MM GEO-1 would reduce impacts to less than significant.	MM GEO-1 Prior to the commencement of ground-disturbing activities (i.e., grading and excavation for footings and utility trenches), a qualified Paleontologist shall be retained and shall attend the pre-grade meeting. Paleontological monitoring shall be conducted, as determined necessary by the Supervising Paleontologist during grading and other excavation work but shall typically be required during ground disturbance in sediments more than five feet in depth and when Older alluvial sediments are encountered. Recommended hours for monitoring activities shall be established by the Supervising Paleontologist based on an understanding of the proposed depth and extent of grading activities. It shall be the responsibility of the Supervising Paleontologist to demonstrate, to the satisfaction of the City, the appropriate level of monitoring necessary based on the grading plan. Any paleontological resource evaluation and salvage work at the Project site and off-site utility corridor alignment shall be conducted under the direction of a qualified Paleontologist. If a fossil discovery occurs during grading operations, grading shall be diverted around the area until the Paleontologist can survey the area, evaluate the discovery, and if significant, salvage the fossil. Any fossils recovered, along with their contextual stratigraphic data, shall be donated to the City of California City, the County of Kern, or another appropriate institution with an educational and research interest in the materials. The Paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.	Less Than Significant with Mitigation

			Level of Significance
Threshold of Significance	Project Impacts	Mitigation Program	After Mitigation
Section 4.8 – Greenhouse Gas Emissions Threshold 4.8a Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	The GHG emissions associated with the proposed Project would not exceed the applicable EKAPCD thresholds. GHG emissions from the Project would be less than significant and no mitigation is required.	No mitigation is required	Less Than Significant
Threshold 4.8b Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	The Project would not conflict with plans, policies and regulations adopted for the purpose of reducing GHG emissions. Therefore, impacts would be less than significant and no mitigation is required.	No mitigation is required	Less Than Significant
Section 4.9 – Hazards and Hazardous Materials			
Threshold 4.9a Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Threshold 4.9b Would the project emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?	Construction vehicles and equipment use at the proposed Project site would involve the short-term use of small amounts of hazardous materials. With compliance with the RR HAZ-1, RR HAZ-2 and RR HYD-1, potential impacts to the public or the environment during short-term construction related to the transport, use, or disposal of hazardous materials and the potential release of hazardous materials into the environment would be less than significant and no mitigation is required.	RR HAZ-1 Hazardous materials and hazardous wastes shall be transported in compliance with any applicable State and federal requirements, including the U.S. Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); and California standards in Vehicle Code Sections 31301 through 34510. RR HAZ-2 Hazardous waste generation, transportation, treatment, storage, and disposal shall be conducted in compliance with the California City Municipal Code and Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Code of Federal Regulations, Title 40, Part 263), including the management of non-hazardous solid wastes and underground tanks storing petroleum and other hazardous substances. Hazardous materials shall also be used, stored and handled in accordance with the regulations of the Kern County EHSD, which serves as the designated CUPA and which implements State and federal regulations for the following programs: (1) Hazardous Materials Management and Response Plans, (2) CalARP, (3) UST Program, (4) Aboveground Petroleum Storage Act Program, (5) Hazardous Waste Generators and Hazardous Waste Tiered Treatment Programs, and (6) California Uniform Fire Code's Hazardous Material Management Plans and Hazardous Material Inventory Statements. RR HAZ-3 Construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, shall be designed and constructed in accordance with the California Code of Regulations (Title 8, Section 1541). This requires notification of nearby utility line operators and prevention of accidental damage to underground utility lines. Refer to RR HYD-1, below.	Less Than Significant
Threshold 4.9c Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school?	There are no schools located within 0.25 mile of the proposed Project site. However, the Robert P. Ulrich Elementary School, located at 9124 Catalpa Avenue, is approximately 0.20 mile south of the proposed off-site natural gas pipeline. The proposed gas line and system improvements would be constructed in accordance with CPUC regulations (RR HAZ-4). Impacts to schools would be less than significant and no mitigation is required.	Refer to RR HAZ-1 and RR HAZ-2, above. RR HAZ-4 The natural gas lines and system improvements shall be designed, constructed, operated, and maintained by the SoCalGas Company in accordance with State and federal regulations, and as reviewed, approved and inspected by the CPUC. No mitigation is required.	Less Than Significant
Threshold 4.9d Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	There are no sites or facilities in the City that are included in the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to Government Code Section 65962.5. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.9e For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	The Project site is located within the Joint Services Restricted R-2508 Complex which is a 20,000-square-mile area north of Edwards Air Force Base. Proposed building heights would not exceed 45 feet but outdoor security lighting would have 100-foot tall light masts. Airport safety hazards to EAFB operations and to inmates or people working at or visiting the Project would be less than significant after the implementation of MM HAZ-1 through MM HAZ-3.	Refer to RR HAZ-1 and RR HAZ-2, above. RR HAZ-3 Construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, shall be designed and constructed in accordance with the California Code of Regulations (Title 8, Section 1541). This requires notification of nearby utility line operators and prevention of accidental damage to underground utility lines. MM HAZ-1 The Project Applicant/Developer shall send notifications of the proposed Project and shall obtain clearances from the Federal Aviation Administration (FAA) and the Edwards Air Force Base (EAFB) to ensure that the proposed structures (e.g., buildings, fences, observation towers, light masts, etc.) would not pose hazards to aircraft operations at EAFB. MM HAZ-2 The proposed exterior lights at the Project shall be shielded and directed downwards into the site and shown in building and site development plans that would be subject to review and approval by the City, FAA and EAFB. The Project Applicant/Developer shall grant an avigation easement over the project site to the U.S. Air Force.	Less Than Significant with Mitigation
Threshold 4.9f Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	The Project would not conflict with the actions identified for California City within the Kern Multi-Jurisdiction Hazard Mitigation Plan (HMP). Impacts would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant
Threshold 4.9g Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	The proposed Project site is not located within a Very High Fire Hazard Severity Zone. Impacts would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant
Section 4.10 – Hydrology and Water Quality			
Threshold 4.10a Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Urban runoff and stormwater from the proposed Project would not violate water quality standards or waste discharge requirements with the implementation of PDF HYD-1 and PDF HYD-2. The water quality-related impacts would be less than significant and no mitigation is required.	PDF HYD-1 The Project will include the construction of a series of stormwater retention basins along the western section of the site. These basins have been designed to accommodate the volume of stormwater from a 10-year 5-day storm event and would promote the infiltration of storm water into the ground or its evaporation, as well as remove pollutants from the runoff. RR HYD-1 The Project will be constructed in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, Order No 2009-0009-DWQ, NPDES No. CAS000002 (or the latest approved Construction General Permit). Compliance requires filing a Notice of Intent (NOI); a Risk Assessment; a Site Map; a Storm Water Pollution Prevention Plan (SWPPP) with proposed construction site Best Management Practices (BMPs); an annual fee; and a signed certification statement. Refer to PDF HYD-1 and RR HYD-1, above. No mitigation is required.	Less Than Significant
Threshold 4.10b Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	The proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Impacts would be less than significant with compliance with regulatory requirements (RR HYD-1), and no mitigation is required.	Refer to RR HYD-1 , above. No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.10c Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site?	The Project would have less than significant impacts related to erosion with implementation PDF HYD-1 and RR HYD-1. No mitigation is required.	Refer to PDF HYD-1 and RR HYD-1, above. No mitigation is required.	Less Than Significant
Threshold 4.10c Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onor off-site? (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	The Project would have less than significant impacts related to surface runoff runoff with implementation PDF HYD-1 and RR HYD-1. No mitigation is required.	Refer to PDF HYD-1 and RR HYD-1, above. No mitigation is required.	Less Than Significant
Threshold 4.10c Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (iv) impede or redirect flood flows? Threshold 4.10d Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	The Project would have less than significant impacts related to flooding with implementation PDF HYD-1. No mitigation is required.	Refer to PDF HYD-1, above. No mitigation is required.	Less Than Significant
Threshold 4.10e Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No impact to the underlying groundwater resources in the California City Subbasin of the Fremont Valley Groundwater Basin would occur with the Project and there would be no conflict with the groundwater management plan. No impacts would occur and no mitigation is required.	No mitigation is required.	No Impact
Section 4.11 – Land Use and Planning			
Threshold 4.11a Would the project physically divide an established community?	There are no residential uses on the Project site, and no established communities exist near the site that would be divided by the Project. The Project would not physically divide an established community. No impacts would occur and no mitigation is required.	No mitigation is required.	No Impact

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.11b Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating and environmental effect?	The Project would not conflict with the applicable land use plans. Impacts would be less than significant and no mitigation is required	No mitigation is required.	Less Than Significant
Section 4.12- Mineral Resources			
Threshold 4.12a Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	The Project site is not known to contain mineral deposits of any economic importance or any otherwise "classified" mineral deposits. Project implementation would not result in the loss of availability of a known mineral. No impact would result and mitigation is not required.	No mitigation is required.	No Impact
Threshold 4.12b Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	The proposed Project and associated infrastructure improvements would not occur in areas identified by the City or the State to have oil, gas, or mineral resources. No impact would result and mitigation is not required.	No mitigation is required.	No Impact
Section 4.10 - Noise			
Threshold 4.13a Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	The Project would generate construction noise. Implementation of MM NOI-1 and RR NOI-1 would reduce impacts to less than significant.	 The Project will be constructed in accordance with Section 5-1.407 of the California City Municipal Code, which exempts construction noise from the City's noise standards if activities occur between 6:00 AM and 8:00 PM between May 15 and September 15 of each year and between 7:00 AM and 8:00 PM during the rest of the year. Construction activities shall not take place on Sundays or federal holidays. Also, the noise level from construction activities shall not exceed 60 dBA plus the limits specified in the Municipal Code, as measured on residential properties and vibration shall not endanger the public health, welfare and safety. A blasting plan will be developed prior to blasting to ensure that any nearby structures are not exposed to levels of vibration that result in cosmetic building damage or excessive noise levels. Measures that would reduce noise levels include the use of blast mats or blankets and sizing the detonation to minimize excessive levels of vibration. The blasting plan shall be reviewed by the City Public Works Director or designee. 	Less Than Significant with Mitigation
Threshold 4.13b Generation of excessive groundborne vibration or groundborne noise levels?	Project construction activities may require blasting to fracture bedrock for removal. Implementation of mitigation measure MM NOI-1 would require a blasting plan to ensure that vibration does not cause any cosmetic building damage to any nearby buildings. With implementation of MM NOI-1 impacts would be less than significant.	Refer to MM NOI-1, above.	Less Than Significant with Mitigation
Threshold 4.13c For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	The 60 dBA CNEL noise contour for the California City Airport would be more than 8 miles from the Project site, the proposed Project staff, inmates, and visitors would not be exposed to excessive aircraft noise levels from this Airport. The noise from military aircraft activities at the EAFB and nearby military facilities would not change with the Project. Since the site is located more than 10 miles from the runways at EAFB, Project exposure to aircraft noise from aircraft takeoffs and landings at EAFB would not be considered excessive. The private Boron Airstrip is	No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts		Mitigation Program	Level of Significance After Mitigation
	located 17 miles to the southwest of the Project site and would not result in excessive noise levels at the Project site. Impacts would be less than significant and no mitigation is required.			
Section 4.14 – Population and Housing				
Threshold 4.14a Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposed new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	The short-term nature of construction activities are not expected to create a demand for housing due to the short-term nature of employment. The Project would create 1,200 jobs, resulting in approximately 150 employee households Visitors of inmates may result in the potential for up to 61 families moving to the area. Potential housing demand could be met with existing vacant housing (1,032 units) and/or by future housing units that could be built on the City's vacant residential-zoned land in the City. Impacts would be less than significant and no mitigation is required.	No mitigation	on is required.	Less Than Significant
Threshold 4.14b Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	There are no dwelling units, residents, employees, households, or inmates at the Project site or the areas proposed for the access road, utility infrastructure improvements, and public facility upgrades. The Project site is currently undeveloped. No people or housing displacement impacts would occur with the Project; no mitigation is required.	No mitigation	on is required.	No Impact
Section 4.15 – Public Services and Recreation				
Threshold 4.15a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (i) Fire protection? (v) other public facilities (medical)?	The Project involves the operation of new structures on the site and up to 3,024 inmates which may pose a fire hazard and create a demand for fire protection services. Implementation of PDF PS-1, PDF PS-3 and PDF PS-4, MM PS-1 and compliance with RR PS-1 would reduce potential impacts to fire protection and emergency medical services to less than significant.	PDF PS-3 PDF PS-4 RR PS-1 MM PS-1	The Project includes space to accommodate both indoor and outdoor recreational facilities for inmate use only, including gyms, recreational areas, and game courts. The Project includes space for the provision of medical services to inmates, including emergency response, medical and mental health screening and other health and medical services. The Project includes a Memorandum of Understanding (MOU) with local law enforcement, fire and emergency medical services (EMS) and local hospitals and trauma centers. The Project will be designed and constructed in accordance with the California City Fire Code (Municipal Code, Title 4, Chapter 1, Article 1) and the regulations of the California City Fire Department, which include standards for building construction that would reduce the creation of fire hazards and facilitate emergency response. The Project Applicant shall ensure adequate resources to finance the Project's fair share contribution for additional staff and/or equipment needed to meet the City's demand for 911 response services so that fire protection personnel and equipment are maintained at such levels to maintain standard levels of service and response ratios. Such a fair share contribution could be through a Community Facilities District, a Funding Agreement between the applicant and the City or some other measure acceptable to the City. Such funding mechanism must be in place before the issuance of the Certificate of Occupancy.	Less Than Significant with Mitigation

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.15a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (ii) Police protection?	Due to the nature of the Project, it would feature higher security levels than most developments, and would include security fencing, perimeter road, observation posts/towers, security lighting, and other building safety measures. It would also be operated by armed security personnel. The Project would include security measures and safety programs for detention facilities. Impacts to police protection services would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant
Threshold 4.15a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (iii) Schools?	The adult inmate population at the Project would not require school services from local school districts because the inmates would be confined to the site and education and training programs would be provided by on-site facilities and programs (PDF PS-2). Impacts to schools would be less than significant, and no mitigation is required.	PDF PS-2 The Project includes indoor space/rooms to accommodate education classes and programs and libraries that will be made available to the inmate population. No mitigation is required.	Less Than Significant
Threshold 4.15a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (iv) Parks?	The recreational needs of Project inmates would be met by on-site facilities (see PDF PS-1) and there would be no long-term demands for additional on-site parks or other recreational facilities. Thus, there would be no long-term impacts on parks and recreation. Impacts would be less than significant and no mitigation is required.	Refer to PDF PS-1, above. No mitigation is required.	Less Than Significant
Threshold 4.15c Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			
Threshold 4.15b Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Project inmates would not increase in the use or demand for recreational facilities in the City or the surrounding area, as the inmates would not be allowed off-site. On-site recreational facilities would be provided for inmate use (PDF PS-1). However, Project employees and inmate family households have the potential to indirectly generate a demand for recreational facilities if they move to the City or the surrounding area. Impacts would be less than significant and no mitigation is required.	Refer to PDF PS-1, above. No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.15a Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (v) other public facilities (libraries)?	Project inmates would not increase the use or demand for libraries in the City or the surrounding area, as the inmates would not be allowed off-site. The inmate population would be served by the on-site library facilities (PDF PS-2) Project employees are also likely to use the on-site library and are not likely to use the California City Library due to their employment at the site.	Refer to PDF PS-2, above. No mitigation is required.	Less Than Significant
Section 4.16 – Transportation and Traffic			
Threshold 4.16a Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No significant impacts from construction traffic would result. It is anticipated that construction worker-related traffic would be largely freeway oriented, arriving and departing via nearby on- and off-ramps at the SR-14 Freeway and SR-58 Freeway. No significant traffic impacts are expected with long-term operation of the proposed Project, which would generate 132 new weekday AM peak hour trips and 132 new weekday PM peak hour. Compliance with RR TRA-1 would ensure that construction related traffic impacts would be less than significant and no mitigation is required. The Project would not result in significant long-term traffic impacts in any of the traffic scenarios evaluated for the Project. Impacts would be less than significant and no mitigation is required.	The Project's construction activities will comply with City regulations and standards, including an encroachment permit for all work on public rights-of-way, inspections by the Department of Public Works; travel lanes on adjacent streets to remain open and unobstructed at all times; 48-hour notification of the California City Fire Department, California City Police Department, Mojave Unified School District, and transit agencies prior to partial or full street closures; and the provision of the necessary traffic control devices to ensure traffic safety. No mitigation is required.	Less Than Significant
Threshold 4.16b Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Given the rural nature and remote location of the Project site, the total regional VMT is expected to increase with the development of the Project. However, the Project VMT per employee is expected to be similar to the adjacent existing CCCC, and therefore, the Project VMT per employee is not expected to be higher than the area average. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and the impact would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.16c Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No changes to the alignment of existing and future off- site roads are proposed by the Project. Also, no changes to the existing roadway network or traffic controls are proposed as part of the Project. The proposed access road to the Project site would align along the south edge of the easterly extension of Gordon Boulevard to provide access to the site (PDF TRA-1). Off-site, compliance with RR TRA-1 would minimize traffic obstruction during the construction phase and would prevent hazards to all persons near the construction zones. Impacts would be less than significant. No mitigation is required.	PDF TRA-1 The Project includes the construction of an access road that would extend east from Virginia Boulevard parallel to the Gordon Boulevard alignment to the northwestern corner of the site. The access road would have one inbound travel lane and one outbound travel lane. Refer to RR TRA-1, below. No mitigation is required.	Less Than Significant
Threshold 4.16d Would the project result in inadequate emergency access?	No changes to roadways are proposed by the Project. Compliance with RR PS-1 would ensure the availability of adequate emergency access to the structures proposed on-site. Compliance with the applicable State and federal requirements for detention centers, correctional facilities, or other future facility uses (RR PS-2 in Section 4.15) regarding security procedures, fire protection, and evacuation and emergency management, would also facilitate emergency access and evacuation. No significant adverse impacts to emergency access would occur. The Project would also comply with City regulations and standards (RR TRA-1) to maintain emergency access to individual parcels, and emergency personnel would be notified of construction zones to facilitate emergency response to and through the construction area. Impacts would be less than significant. No mitigation is required.	Refer to RR PS-1 and RR PS-2 and RR TRA-1, above. No mitigation is required.	Less Than Significant
Section 4.17 – Tribal Cultural Resources			
Threshold 4.17a Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	The Project site is undeveloped and no cultural resources were observed during the archaeological field survey of the site. Also, no structures or site improvements that may be considered tribal cultural resources would be disturbed or demolished by the proposed Project. The Project site is not listed in the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), or other local register as a historical resource. No impacts to tribal cultural resources would occur and no mitigation is required.	No mitigation is required.	No Impact
Threshold 4.17b Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to	There are no known tribal cultural resources on the Project site, the utility corridor alignment nor on public facility improvement sites. However, compliance with RR CUL-1 and implementation of MM CUL-1 would reduce the potential impacts of the possibility that tribal cultural resources/materials or Native American human remains could be uncovered during grading and subsurface excavations for the construction of the	Refer to MM CUL-1 and RR CUL-1, above. No mitigation is required.	Short-Term Construction Impacts Less Than Significant Long-Term Operational Impacts No Impact

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	proposed Project. Impacts would be less than significant with mitigation.		
Section 4.18 – Utilities and Service Systems			
Threshold 4.18a Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could	The Project would require new utility service to service the Project site. Implementation of PDF UTL-1 through PDF UTL-3, RR UTL-1, MM UTL-1 would ensure that impacts related to new utility service would be less than significant.	PDF UTL-1 The Project will include the construction of an additional 550 gpm pump at the Phase 1 BPS and the construction of a new water line from the existing water line in Virginia Boulevard along the easterly extension of the alignment of Gordon Boulevard toward the northwest corner of the site and new on-site fire and domestic/potable water lines that connect to proposed buildings, including new fire hydrants, as required by the California City Fire Department and/or Department of Public Works.	Less Than Significant with Mitigation
cause significant environmental effects?		PDF UTL-2 The Project will include the construction of new on-site sewer lines that connect to proposed buildings from the proposed sewer line at the southwestern corner of the site, as required by the California City Department of Public Works. In addition, a sewer lift station, force main line and/or holding tank may also be built on-site.	
		PDF UTL-3 The Project will include the construction of a new sewer line from the existing sewer line on Twenty Mule Team Parkway running parallel to the existing sewer line on 145 th Street and Gordon Boulevard and under Option 1 - running south on Virginia Boulevard and then east along the southern boundary of the existing CCCC to the site and turning south of the southwestern corner of the site or under Option 2 – continuing east along the northern boundary of the existing CCCC to the site, which would be connected to a force main running north from a sewer lift station at the southwestern corner of the site. If a 100,000-gallon holding tank is built on site under this option, there may be no need to construct parallel sewer lines on Gordon Boulevard and 145 th Street.	
		RR UTL-1 The Project's water, sewer, storm drain, and other utility infrastructure improvements will be designed, constructed and operated in accordance with the applicable regulations set forth in the California City Municipal Code, which incorporates by reference the California Building Code, including the California Electrical Code, the California Mechanical Code, the California Plumbing Code, the California Fire Code, and the California Green Building Standards Code.	
		MM UTL-1 The Applicant shall pay for the installation of an additional water pump at the City's Phase 1 BPS. The new pump shall be added to the existing pump station with a capacity of approximately 550 gallons per minute (gpm) and a total dynamic head (TDH) of 300 feet to match the head on the existing pumps and meet the maximum day demand within the pressure zone.	
		MM UTL-2 The Applicant shall pay its fair share costs for the improvements needed at the City's wastewater treatment plant based on the proposed Project's anticipated sewage flow of 0.28 MGD. Functional improvements would occur to the aeration basins, clarifiers, tertiary filtration system, sludge dewatering and percolation/evaporation ponds while reliability improvements would occur with several operational systems associated with disinfection, grit removal, electrical and control, pumping, and solids dewatering.	

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.18b Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	The project would require new water service to the site. The City has available water rights and pumping capacity to meet additional water demand due to future growth, as well as Project water demand. The Water Supply Assessment also states that the City can meet the water demands from the Project and other existing and future developments within its service year during a normal year, single dry year, and multiple dry years, with remaining surplus supply. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant
Threshold 4.18c Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	The Project would require new wastewater service. With implementation of PDF UTL-2, PDF UTL-3, MM UTL-2, impacts would be less than significant.	Refer to PDF UTL-2, PDF UTL-3, MM UTL-2, above.	Less Than Significant with Mitigation
Threshold 4.18d Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	The Project would generate new solid waste. With implementation of PDF UTL-2 and RR UTL-3, impacts would be less than significant and no mitigation is required.	 RR UTL-2 The Project will be constructed and operated in accordance with the City's Waste Management regulations, as outlined in Title 6, Chapter 2 of the Municipal Code. The regulations prohibit the accumulation of wastes in public areas, waste scavenging, and the burial or burning of wastes; sets standards for waste containers/receptacles and waste storage; and waste collection services and franchises. RR UTL-3 The Project will prepare a waste management plan to comply with Chapter 10 in Title 6 of the Municipal Code and the CalGreen Code, which requires the diversion of 50 percent of waste tonnage, including concrete and asphalt, and 15 percent of waste tonnage excluding concrete and asphalt. The waste management plan shall be submitted to the City as part of the building or demolition permit; implemented during construction; and a completed waste management plan shall be submitted to the City after construction that shows actual data on tonnage of materials recycled and diverted. No mitigation is required. 	Less Than Significant
Threshold 4.18e Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	The Project would comply with applicable solid waste regulations. With implementation of RR UTL-2 and RR UTL-3, impacts would be less than significant and no mitigation is required.	Refer to RR UTL-2 and RR UTL-3, above. No mitigation is required.	Less Than Significant
Section 4.19 – Wildfire			
Threshold 4.19a If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. However, implementation of RR PS-1 and RR TRA-1 reduce potential impacts to emergency evacuations to less than significant. No mitigation is required.	Refer to RR PS-1 and RR TRA-1, above. No mitigation is required	Less Than Significant
Threshold 4.19b If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. However, the Project would add structures and human occupancy to the site and construction of the Project would be in compliance with applicable fire code and building code requirements. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant

Threshold of Significance	Project Impacts	Mitigation Program	Level of Significance After Mitigation
Threshold 4.19c If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. However, the use of flammable materials and equipment is heavily regulated and would be used in compliance with applicable fire code and building code requirements. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant
Threshold 4.19d If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?	Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. there are no steep slopes on the Project site where landslides may occur and no landslides have been identified or mapped at the Project site. The Project site is designed at Zone X-areas determined to be outside of the 500-year floodplain. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant

1.3.2 SCOPING PROCESS

The City has complied with the State CEQA Guidelines by providing opportunities for early participation by responsible and trustee agencies in the environmental review process, as well as an opportunity for early public consultation with interested organizations and individuals. Specifically, the NOP providing notice of a Scoping Meeting was distributed on December 27, 2017, to federal, State, regional, and local government agencies and interested parties to solicit comments and to inform agencies and the public of the proposed Project during a 40-day public review period that extended from December 27, 2017 to February 5, 2018. The NOP was also published in the Desert News on January 5, 2018. Copies of the NOP were also made available at the following locations:

City of California City 21000 Hacienda Boulevard California City, CA 93505 (760) 373-8661

Kern County Library – California City Branch 9507 California City Boulevard California City, California 93505 (760) 373-4757

The Project was described in the NOP; has having potential environmental effects associated with Project approval and implementation were identified; and agencies and the public were invited to review and comment on the issues to be addressed in the EIR. The NOP is provided in Appendix A-1 of this EIR. Comments on the NOP were received from four agencies, which are provided in Appendix A-2. The NOP comment letters are listed in Table 1-2 below, along with a summary of the issues raised and the EIR section where the issues raised are addressed.

TABLE 1-2 COMMENTS ON THE NOP

Commenting Agency/Group (Date of Comment Letter)	Issues Raised	EIR Section that discusses the issues		
Eastern Kern Air Pollution Control	District Rule 402 (Fugitive Dust)	Section 4.3		
District (January 9, 2018)	District permits needed	Section 3.4.2 Section 3.4.2		
	Wastewater Treatment Plant (WWTP) expansion permits			
California Department of	New traffic analysis			
Transportation (January 18, 2018)	Impacts on SR58/California Blvd and SR14/California Blvd intersections	Section 4.16		
	State highway access points			
	Mitigation for traffic impacts			
	Feasibility Study Report for SR 58			
California Department of	Traffic impacts to adjacent CCCC	Section 4.16 Section 4.3 Section 4.13 Section 3.0		
Corrections and Rehabilitation (January 25, 2018)	Short-term construction air quality impacts			
(00.100.)	Short-term construction noise impacts			
	Project operations and design			
Native American Heritage	Impacts on historical resources			
Commission (January 31, 2018)	SB18, AB 52 and National Historic Preservation Act			
	Consultation with Native American tribes	0		
	AB 52 process	Section 4.5		
	SB 18 process			
	Cultural Resource Assessments			
California Department of Fish and	CDFW as Trustee and Responsible Agency			
Wildlife (February 21, 2018)	Project area is within Mojave Desert habitat			
	Impacts on biological resources and proper avoidance, minimization and mitigation measures	Section 4.4		
	Impacts to the desert tortoise, Mohave ground squirrel, burrowing owl, desert kit fox, American badger, special status plant species, and nesting birds and appropriate mitigation			
	New Incidental Take Permit for desert tortoise and Mohave ground squirrel may be necessary			
	Impacts to ephemeral streams and need for Streambed Alteration Agreement			
	Impacts to federally listed species			
	Survey reports to the California Natural Diversity Database			
	NOD filing fees			
NOP comment letters are provided in Appendix A-2.				

The City held a Scoping Meeting for the EIR at 6:00 PM on January 24, 2018, at the California City Council Chambers at 12000 Hacienda Boulevard in California City, California 93505. The

purpose of the Scoping Meeting was to provide an additional forum for the public and other agencies to provide input on the environmental issues that should be addressed in the EIR.

When considering comments received during the NOP review period from agencies and individuals, the primary areas of known controversy related to environmental concerns at the time of the issuance of Notice of Availability (NOA) for the Draft EIR include, but are not limited to:

- Impacts on sensitive biological and cultural resources
- Traffic, air quality, and noise impacts
- Increases in utility and/or public service demands

The specific issues that were contained in comments submitted on the NOP are discussed in various sections of the Draft EIR, with those related to Project features addressed in Section 3.0 and those related to environmental impacts discussed in Section 4.0 of this EIR.

1.3.3 ENVIRONMENTAL ANALYSIS

To facilitate the analysis of each environmental issue, a standard format was developed to analyze each issue in Section 4.0 of this EIR. The basis of the environmental analysis for each environmental issue is provided at the start of each section to inform the reader of the technical studies prepared for the Project and/or the major references used in the EIR.

Relevant Programs and Regulations

Under each environmental issue, a summary of the existing federal, State, regional, County, and local laws, regulations, and ordinances that directly relate to the environmental issue being analyzed is provided. The summary provides background information about ongoing policies and programs that are in place and to set the regulatory setting under which the Project would occur.

Existing Conditions

The environmental conditions (as they relate to each environmental issue) that exist on the Project site and in the surrounding area are discussed to provide the baseline conditions with which environmental changes associated with the Project would be compared and analyzed. In accordance with Section 15125 of the State CEQA Guidelines, both the local and regional settings are discussed as they existed when the NOP was circulated from December 27, 2017 to February 5, 2018.

Thresholds of Significance

Section 15126.2 of the State CEQA Guidelines requires that an EIR "identify and focus on the significant environmental effects of the proposed project". "Effects" and "impacts" mean the same under CEQA and are used interchangeably in this EIR. A "significant effect" or "significant impact" on the environment is "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (State CEQA Guidelines, Section 15382).

In determining whether an impact is "significant", Section 15064.7 of the State CEQA Guidelines encourages each public agency to develop and publish thresholds of significance to use in determining the significance of an environmental impact. These thresholds may consist of identifiable quantitative, qualitative, or performance-level criteria used to determine non-compliance or compliance. Non-compliance would mean the effect would be significant, and

compliance with the thresholds would mean the effect would normally be considered less than significant.

The City has not adopted thresholds of significance for general use. Therefore, the significance criteria used in the analysis in Section 4.0 of this EIR are derived in part from Appendix G of the State CEQA Guidelines. In addition, City policies and standards, as well as thresholds adopted by other public agencies with jurisdiction over select environmental issues, are used as thresholds of significance. Accepted technical and scientific data are used in some instances to determine if an impact would be considered significant. An effort has been made to use generally accepted thresholds upon which significance can be determined. These thresholds are used in analyzing the potential environmental impacts of the Project.

Project Design Features

Project Design Features (PDFs) are specific design elements incorporated into the Project that are included in the Project's final plans and contractor specifications and would prevent the occurrence of, or reduce the significance of, potential environmental effects. Because PDFs have been incorporated into the Project, they do not constitute mitigation measures as defined by CEQA. However, PDFs are identified in the MMRP for convenience of tracking to ensure compliance monitoring.

Regulatory Requirements

There are local, County, regional, State, and federal regulations, laws, and ordinances that are required independent of CEQA review but also serve to avoid or reduce the potential environmental impacts of a project. In addition, a number of ongoing programs and practices can reduce or avoid environmental impacts. As all public and private projects are required to comply with these regulations, they are not listed as mitigation measures but are identified as Regulatory Requirements (RRs). RRs are identified in the MMRP for convenience of tracking to ensure compliance monitoring.

Environmental Impact Analysis

The analyses of environmental impacts of the proposed Project are presented in this EIR by environmental issue, and include the direct and indirect, short-term and long-term, cumulative, and any unavoidable impacts from construction and operation of the Project, with consideration of impacts that would occur on-site and off-site.

The thresholds of significance (discussed above) provide the basis for distinguishing between impacts that are determined to be significant (i.e., the impact exceeds the threshold of significance) and those that are considered to be less than significant. The analysis is structured to address each threshold, while considering the residual impact after implementing the PDFs and after compliance with the RRs.

Where the analysis of a potential effect concludes that the effect is too speculative or subjective for evaluation, that conclusion is noted and the discussion of that effect is ended. Where the analysis determines that a potential effect may (without undue speculation) occur, but is beneficial, that conclusion is noted. Where the analysis indicates that a potential effect is not significant or not adverse with compliance with PDFs and RRs, that conclusion is also noted.

Where the impact analysis determines that a potential effect may (without undue speculation) occur and is found to have a substantial or potentially substantial and adverse impact on existing physical conditions on the site or in the surrounding area and that the impact would remain

significant even after compliance with PDFs and RRs, that conclusion is noted. A discussion of the needed mitigation is then provided, along with a summary of the analysis for each threshold.

Cumulative Impacts

While the extent of environmental changes that would occur with the Project may not be significant, the sum of the impacts of the Project and other developments that are proposed, planned, or under construction in the surrounding area may be cumulatively considerable, as defined in Section 15065(a)(3) of the State CEQA Guidelines. Section 2.4 of this EIR contains a discussion of the overall methods used for the cumulative impact analysis. The anticipated environmental changes resulting from the Project on a cumulative level are addressed under each environmental issue in Section 4.0 of this EIR.

Mitigation Measures

Where a potentially significant adverse environmental effect has been identified and is not reduced to a level considered less than significant through compliance with the PDFs and RRs, mitigation measures (MMs) have been recommended.

Implementation of the MMs under each environmental issue would avoid or reduce potentially significant adverse impacts that would remain after implementation of the PDFs and compliance with the RRs.

Level of Significance after Mitigation

The level of significance of the identified impacts after incorporation of the PDFs, compliance with the RRs, and implementation of the MMs is stated at the end of each environmental issue. Unavoidable significant adverse impacts, if any, are effects that cannot be mitigated or that remain significant even after mitigation.

References

Technical studies, analyses, reports, plans, and other sources that have been used in the preparation of the environmental analysis for each issue area are listed in this section.

1.4 PUBLIC REVIEW OF THE DRAFT EIR

Upon completion, the Draft EIR was distributed to responsible and trustee agencies, other affected agencies, surrounding cities, interested parties, and all parties who requested a copy of the EIR in accordance with CEQA. A notice announcing the availability (NOA) of the Draft EIR was also published in the Antelope Valley Press on May 21, 2021.

Hard copies of the Draft EIR are available for viewing at the following locations:

City of California City 21000 Hacienda Boulevard California City, California 93505 Comments on the Draft EIR from public agencies and interested individuals will be accepted during the 45-day public review period extending from May 21, 2021 through July 6, 2021. During the comment period, inquiries and written comments on the Draft EIR should be sent to the City of California City by mail or email to:

Planning Department
City of California City
21000 Hacienda Boulevard
California City, California 93505
Email: planning@californiacity-ca.gov

1.5 PROJECT SPONSOR

The Project is being proposed by:

CoreCivic, Inc. 5501 Virginia Way, Suite 110 Brentwood, Tennessee 37037

SECTION 2.0 ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION AND SETTING

The site for the proposed Correctional Facility at California City (CFCC) (also referred to in this EIR as the proposed Project or Project) is located in the City of California City (City) on approximately 216.5 acres of undeveloped land east of the existing California City Correctional Center (CCCC), which is also owned by CoreCivic but operated by the California Department of Corrections and Rehabilitation (CDCR).

2.1.1 KERN COUNTY

The Project site is located in the southeastern portion of Kern County (County), which is located at the northwestern section of the Mojave Desert. Kern County covers an area of 8,202 square miles and consists of 11 incorporated cities (Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco) and 40 unincorporated communities (Kern County 2009).

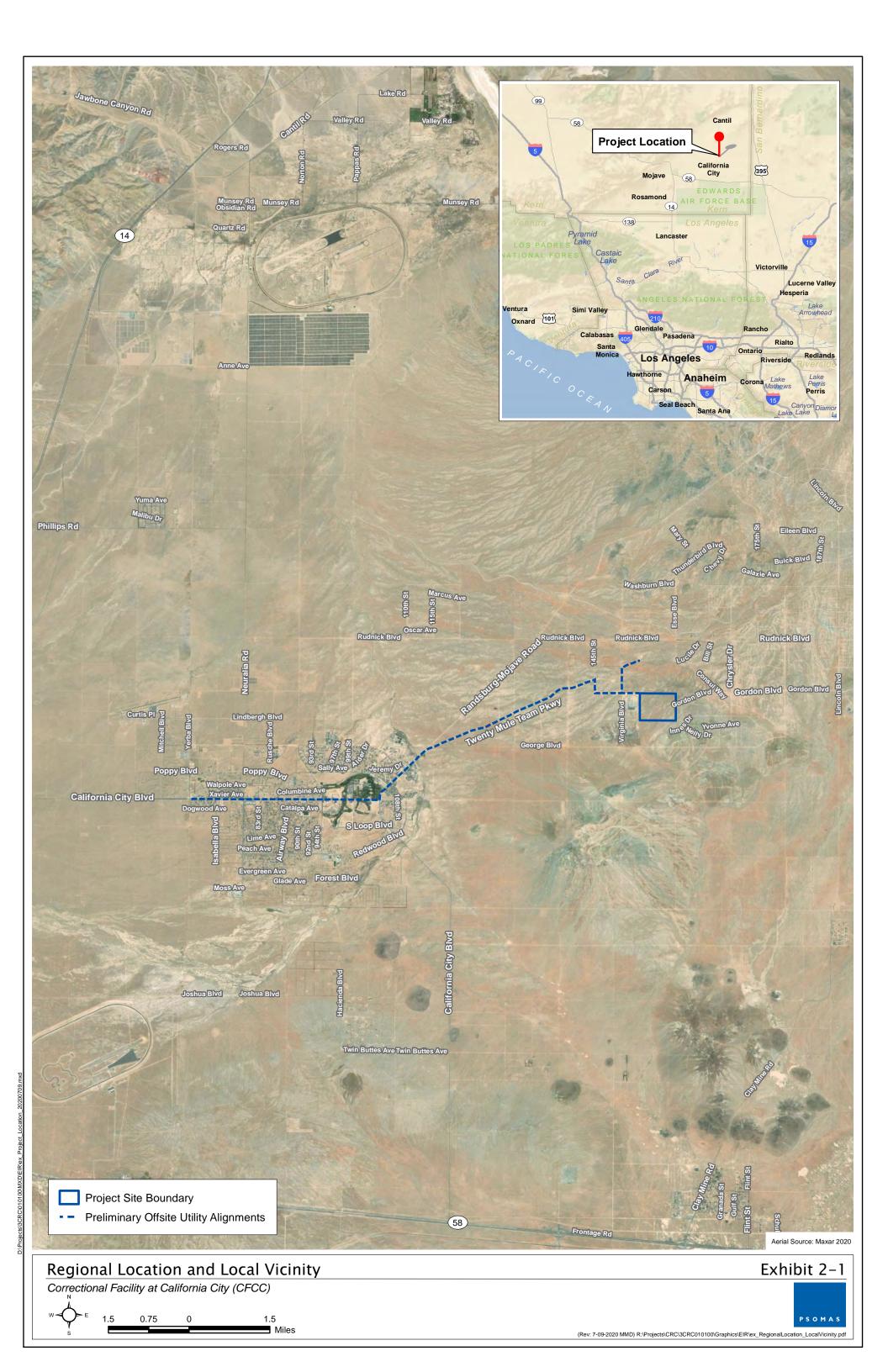
The County had a January 2020 population of 917,553 persons, with 887,188 residents in households and 30,365 residents in group quarters (i.e., places where people live or stay in a group living arrangement, such as correctional facilities, juvenile facilities, nursing facilities/skilled nursing facilities, other health care facilities, college/university student housing, military group quarters, and other non-institutional facilities). The County's housing stock consisted of 299,674 dwelling units, of which 214,230 units were single-family detached units and 23,060 units were mobile homes. The remaining 62,384 units were multi-family and attached units. The average household size in the County was 3.20 persons per household and the vacancy rate was 8.8 percent (DOF 2020). The majority of the County's resident population and housing stock are in the Metropolitan Bakersfield area, in the western central section of the County.

2.1.2 CALIFORNIA CITY

The Project site is located in the central portion of the City, which covers 203 square miles in Kern County. The City and surrounding areas are at the southern section of the Fremont Valley and the northern section of the Antelope Valley, which, in turn, are located at the western end of the Mojave Desert. This project area is bound by the Rand Mountains to the north, the Tehachapi Mountains to the west, and the San Gabriel Mountains to the south (California City 2009).

The City is located approximately 60 miles southeast of the Metropolitan Bakersfield area; approximately 35 miles north of the City of Lancaster in Los Angeles County; approximately 4 miles northwest of Edwards Air Force Base at its nearest point; and approximately 65 miles northwest of the City of Victorville in San Bernardino County. Unincorporated County areas surround the City on all sides; and the nearest communities to the City include Mojave to the southwest, Boron to the southeast, North Edwards to the south, and Randsburg to the north. Exhibit 2-1, Regional Location and Local Vicinity, shows the location of the site in California City.

Development in the City is concentrated within approximately 11,520 acres in the southwestern portion of the City (which consists of the "First Community" containing approximately 9,600 acres of multi-family and smaller single-family residential lots and the "Second Community" located to the east of the "First Community" and consisting of larger residential lots). Together, the First Community and Second Community are considered the City's central core. A smaller development area is located at the northeastern portion of the City, with land that has been subdivided but remains largely undeveloped due to the lack of utility infrastructure and public



services. The rest of the City remains largely undeveloped or developed with scattered, low intensity uses.

California City had a January 2020 population of 14,161 residents, with 11,982 residents in households and 2,179 residents in group quarters. Its housing stock included 5,219 dwelling units, of which 4,050 units were single-family detached units, 442 units were mobile homes, and 727 units were multi-family and attached units. The average household size in the City was 2.86 persons per household and the vacancy rate was 19.8 percent (DOF 2020).

2.2 PROJECT SITE CHARACTERISTICS

2.2.1 DEVELOPMENT SITE

The Project site for the proposed CFCC is located on a portion of the northern half of Section 13, Township 32 South, Range 38 East of the Mount Diablo Base and Meridian, and consists of the central and eastern portions of Assessor's Parcel Number 350-031-02. The site boundaries are shown in Exhibit 2-1 and Exhibit 2-2, Aerial Photograph.

Aesthetics

The Project site, located adjacent to an existing 65-acre correctional center, is undeveloped and is visible from public roadways as part of the larger desert floor, with scattered scrub vegetation and dirt roads and trails frequented by off-road vehicles. The site has a moderately sloping and undulating topography, with a flatter area at the southwestern section.

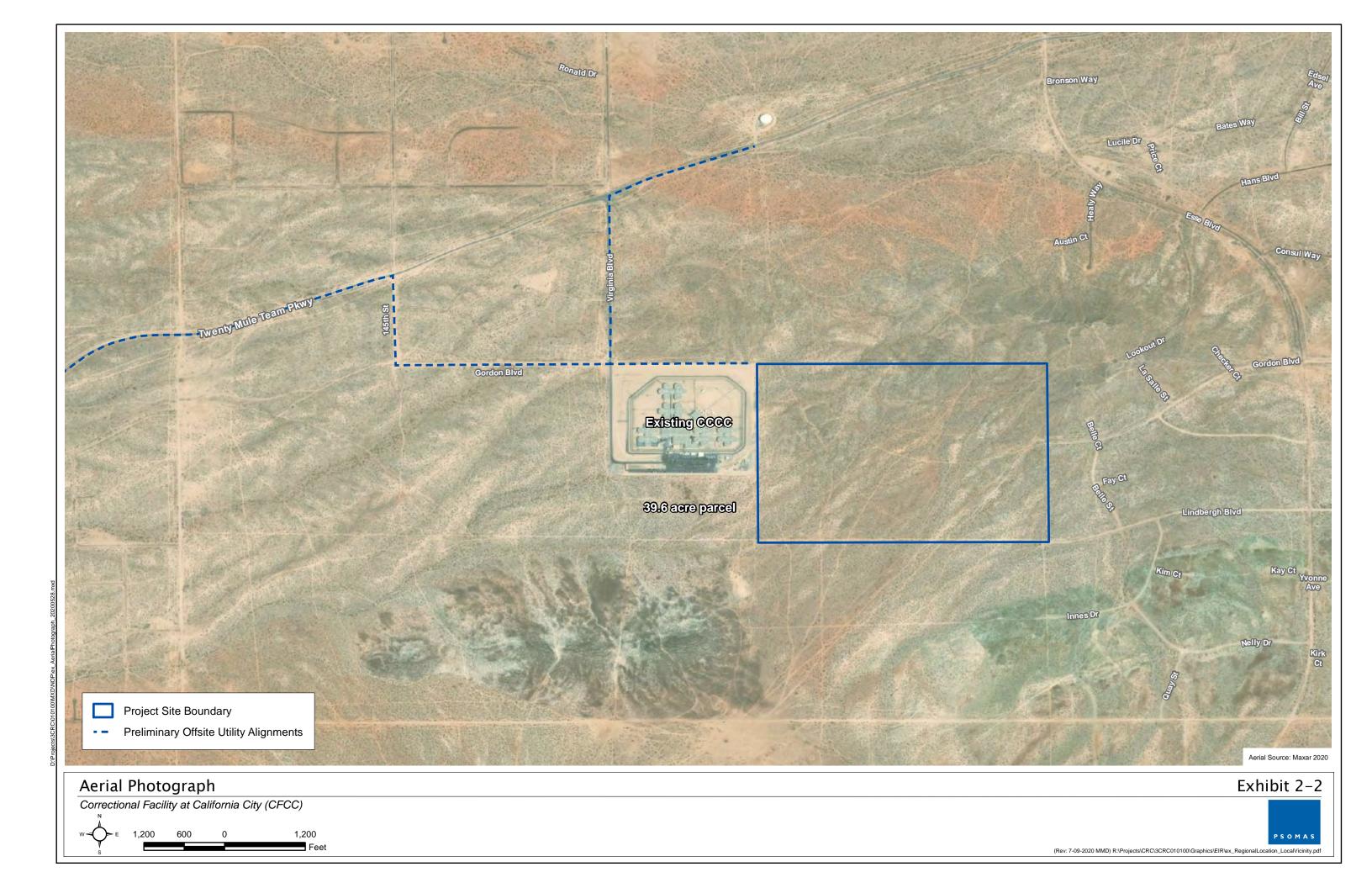
Air Quality

The Project site is located in the western end of the Mojave Desert Air Basin, which includes the eastern portion of Kern County, the northeastern portion of Los Angeles County, the High Desert (northern and central) portions of San Bernardino County, and the Palo Verde Valley (eastern portion) of Riverside County (CARB 2005). The portion of the Mojave Desert Air Basin in the eastern section of Kern County, where the site is located, is under the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD) (EKAPCD 2018). This portion of the air basin is classified as non-attainment of the State ambient air quality standards for ozone and PM10 (respirable particulate matter less than 10 micrometers in diameter) and the federal 8-hour ozone standard (CARB 2017, 2015a, 2015b).

Biological Resources

The Project site and areas to the north, east and south of the Project site are comprised of vacant undeveloped desert land, characterized by open ground with limited vegetation. Granitic bedrock outcrops and rocky to gravelly soils are overlain by a shallow layer of sandy gravelly alluvium, with small drainage channels that run from the northeast to the southwest. The Project site is crossed by a network of small off-highway vehicle (OHV) roads (Psomas 2020b).

Vegetation on the site is dominated by an alliance creosote bush-white bursage, as found throughout the Project area (i.e., Project site and surrounding areas). Creosote bush (*Larrea tridentata*) plants are approximately 3 to 5 feet high; white bursage (*Ambrosia dumosa*) plants are found in 18-inch mounds, with higher density along the drainages. Rock outcrops support creosote bush, white bursage, California barrel cactus (*Ferocactus cylindraceus*), cottontop cactus (*Echinocactus polycephalus*), and Mojave Desert California buckwheat (*Eriogonum fasciculatum* var. *polifolium*). The site provides suitable habitat for a variety of species, including the desert tortoise (*Gopherus agassizii*) (federally Threatened, State Threatened), Mohave



ground squirrel (*Xerospermophilus mohavensis*) (State Threatened), and burrowing owl (*Athene cunicularia*) (State Species of Special Concern) (Psomas 2020a).

Cultural Resources

The Project area falls within the traditional territory of the Kitanemuk and Kawaiisu groups. A number of cultural resources investigations have been conducted in the area and, while there are four previously recorded resources on the site, three of these were not found (re-located) during the archaeological field survey in 2017. The fourth resource is Twenty Mule Team Parkway, which was the historic wagon route that operated between Death Valley and Mojave (from around 1884 to 1889). The pedestrian survey of the site and utility alignments did not identify the presence of newly identified cultural resources (Psomas 2021).

The paleontological record search did not identify the presence of vertebrate fossil sites on the site and surficial deposits on the site typically do not contain significant vertebrate fossils. However, the underlying sediments near the site have been recorded to contain vertebrate remains. Thus, the Project area is considered moderately sensitive for paleontological resources (Psomas 2021).

Geology and Soils

The Project site consists of a pediment that is partially mantled by surficial deposits and has a gentle to moderate slope to the southwest. Bedrock outcrops are present at the northern and northeastern portion of the site. The geologic map for the area indicates the site has Holoceneage alluvial sediments, which overlay pre-Tertiary granite and quartz monzonite bedrock. Ground elevations on the site range from approximately 2,670 feet above mean sea level (msl) at the northeast corner to 2,550 feet above msl at the southwest corner (Leighton 2017).

There are no active earthquake faults in the City, with the nearest fault (Garlock Fault) located approximately 8 miles northwest of the City (California City 2009). An unnamed fault of the Garlock Fault Zone is located approximately 5.6 miles northwest of the site. The Lockhart Fault, a concealed fault, is located 5.6 miles northeast of the site; and there are several unnamed faults approximately 1.0 mile south of the Project site are identified to be Pre-Quaternary faults (before 1.6 million years) (Leighton 2017).

Hazards and Hazardous Materials

The Project site is currently vacant and is not involved in the use, storage, handling or disposal of hazardous materials or hazardous wastes. Also, there are no hazardous material pipelines on or near the Project site.

The Project site is located approximately 10 miles north of Edwards Air Force Base (EAFB) and is within the 30,000 feet to unlimited supersonic area for the EAFB but is outside the spin zones, drop zones, Cords Road, and other areas/routes for aircraft operations at the Base (EAFB 2016). The California City Airport is located at 22636 Airport Way, approximately 8.6 miles west of the site.

The site is designated as having Moderate Fire Hazard Severity by the California Department of Forestry and Fire Protection (CalFire 2007).

Hydrology and Water Quality

The majority of storm water on the undeveloped Project site percolates into the ground, with runoff sheet flowing toward the southwest based on the local topography. There is no developed storm drain system serving the site and the surrounding area. Storm water generally percolates into the bare soils of undeveloped land, with stormwater overflows towards Cache Creek to the west and into Koehn Lake to the north during heavy rains.

The Project site is not located within the 100-year or 500-year floodplains (FEMA 2008). The City overlies the Fremont Valley, Antelope Valley, and Harper Valley groundwater basins but the Fremont Valley Groundwater Basin underlies the developed areas of the City. The Fremont Valley Groundwater Basin consists of the Mojave City Subbasin and the California City Subbasin. The City obtains the majority of its potable water from groundwater pumped from the California City Subbasin (Stetson Engineers 2009).

Land Use and Planning

In the California City General Plan Designation Map, the site is designated as Controlled Development, Public Parks and Recreation and Public Schools, with a sliver at the northern edge designated as Conservation Land (California City 2016b). The Controlled Development, Public Parks and Recreation and Public Schools designation allows a variety of land uses that are consistent with the goals, objectives, and policies of the City's General Plan and subject to approval of detailed plans that serve to address the social, environmental, and economic concerns of the community. This designation is conditionally compatible with industrial uses, commercial uses, recreational uses, large lot subdivisions, open space uses, agricultural and horticultural uses. Areas designated as Conservation Land include land designated for the protection, preservation and conservation of unique areas (California City 2009).

The site is zoned Residential Agricultural (RA) and Open Space (O). The Controlled Development, Public Parks and Recreation and Public Schools designation is consistent/compatible with the RA and O zoning districts (California City 2009). Governmental or quasi-governmental correction, probation or prison facilities and services are conditionally allowed in the RA zoning district (Municode 2017).

Public Services and Facilities

The California City Police Department (CCPD) provides police protection and law enforcement services in the City from their station, located at 21130 Hacienda Boulevard. The department has 13 sworn officers and 6 non-sworn personnel and provides uniformed patrol, investigations, offroad search and rescue, special enforcement, and animal control services (California City 2018).

The California City Fire Department (CCFD) provides fire protection and emergency medical services to the City, as well as fire prevention, fire suppression, fire investigation, public safety education, hazardous material response, technical rescue and domestic threat preparedness. The CCFD has a staff of 13 persons, including a fire chief, 3 captains, 3 fire engineers, and 6 firefighters and its station is located at 20890 Hacienda Boulevard (California City 2016a).

The Mojave Unified School District provides school services in the Project area through the Ulrich Elementary School, California City Middle School, and California City High School. The Kern County Library system has branch libraries in California City, Mojave, and Boron.

The vast open space in the Project area offers formal and informal use by off-highway vehicles (OHV) and the City has various local parks, with the Borax Bill OHV Park located approximately 1.5 miles northeast of the site.

Transportation and Traffic

Regional access to the Project site is provided by State Route (SR) 58 (approximately 10 miles to the south of the site), SR 14 (approximately 13.2 miles to the west) and U.S. Route (US) 395 (approximately 14.9 miles to the east). Local access is provided by Twenty Mule Team Parkway and Virginia Boulevard, with dirt roads from these paved roads leading into the site.

Public transit services in the City are provided by Kern Transit. In addition, the City also has a California City Transit dial-a ride program that is limited to the City's central core (California City 2018b)

There are no existing or proposed transit routes, bikeways, trails, or railroads near the Project site (Kern Transit 2016). The California City Municipal Airport is a 222-acre airport, owned and operated by the City and located northwest of the City's central core (California City 2009).

Utility Systems and Infrastructure

Water and sewer services in the City are provided by the City's Public Works Department. Waste Management, Inc. provides waste collection service in the City. Southern California Edison Company (SCE) provides electrical service in the City and Southern California Gas Company (SoCalGas) provide gas service in the City's central core.

No utility infrastructure exists on the Project site. However, water, sewer, power, and telephone utility infrastructure are present near the site in the Virginia Boulevard right-of-way, and serve the adjacent CCCC. This is discussed in Section 2.3.3, Adjacent Utility Infrastructure, below.

2.2.2 OFF-SITE AREAS

In addition to the 216.5-acre development site, the Project would require a number of utility infrastructure improvements that would occur along public roads and at public utility/infrastructure sites. These off-site areas include the following roads:

Twenty Mule Team Parkway – Twenty Mule Team Parkway is a two-lane northeast-to-southwest paved roadway located 0.6 mile north of the site. Dirt shoulders cleared of vegetation and parallel dirt roads several feet to the north and south are present on both sides of the road, along with power lines on wooden poles along the north side of the road. No development exists along either side of the 5.3-mile segment of this road from Randsburg Mojave Road (on the west) to Rudnick Boulevard (on the east), except for the City's water storage tank and equipment building located along the north side of this road approximately 0.40 mile east of Virginia Boulevard.

Virginia Boulevard – Virginia Boulevard is a two-lane asphalt-paved roadway that extends for 0.75 mile south from Twenty Mule Team Parkway to the western boundary of the CCCC and then turns east into the parking lot of the CCCC.

Gordon Boulevard – Gordon Boulevard is an existing unpaved dirt road extending west from Virginia Boulevard to 145th Street, with parallel dirt roads several feet north and south of Gordon Boulevard. No development exists on either side of the 0.5-mile long road Access to the site would require construction of an access road parallel to the alignment of the easterly

extension of Gordon Boulevard from Virginia Boulevard through land previously disturbed for construction of the CCCC for approximately 0.34 mile to the northwestern corner of the site.

145th **Street –** This is a dirt road that runs north from Gordon Boulevard to Twenty Mule Team Parkway and south to Lindberg Boulevard. No development exists on either side of this roadway segment.

Randsburg Mojave Road – This is a two- to four-lane road with a dirt median that extends from the City's central core, northeasterly to its intersection with Twenty Mule Team Parkway. Outside the central core and farther northeast, it becomes a two-lane dirt road.

California City Boulevard – California City Boulevard is a major transportation route through the western and southern portions of the City and is classified as part of National Highway System. California City Boulevard provides access from SR-14 and SR-58 to the City. It runs east-west through the western and central portion of the City. West of the central core area, California City Boulevard is a two-lane paved road between Baron Boulevard and the overpass at SR-14. East of Baron Boulevard, California City Boulevard is a four-lane paved road to where it turns southward and intersects with Redwood Boulevard. There it leaves the City and becomes a two-lane paved road until its at-grade intersection with SR-58.

The off-site areas also include the following existing utility facilities:

City Water Storage Tank site – The City has a 2.5-million-gallon circular concrete water tank (Phase 1 tank) north of Twenty Mule Team Parkway and east of Virginia Boulevard within Bureau of Land Management (BLM) land. This tank site also has the City's Phase 1 booster pump station (BPS) within a small equipment building. The tank and BPS site is surrounded by a perimeter chain link fence.

City Wastewater Treatment Plant – The City has a wastewater treatment plant (WWTP) with a 1.0 million gallon per day treatment capacity on Nelson Drive (at the northeastern section of the City's central core). This plant site includes treatment and processing equipment, open treated water storage/percolation ponds, an equipment building, metal shed, and paved areas, surrounded by a chain link fence.

2.3 SURROUNDING LAND USES

The Project site is surrounded by undeveloped land, except for the neighboring CCCC, an existing correctional facility immediately adjacent to the west. Exhibit 2-2 shows an aerial photograph of the land uses on the Project site and immediately surrounding area. A brief description of the land uses immediately surrounding the Project site is presented below.

2.3.1 CALIFORNIA CITY CORRECTIONAL CENTER

Immediately west of the Project site is the CCCC, which is located at 22844 Virginia Boulevard and occupies 67.46 acres at the western Project site boundary.

The CCCC is a Level II¹ facility owned by CoreCivic and leased, staffed and operated under the authority of the CDCR (CDCR 2016a). The CCCC was built in 1999 and began housing State inmates in 2013 (CDCR 2016b). Prior to this date, the facility housed federal detainees for the US Marshalls Service and the Immigration and Customs Enforcement (Bakersfield Californian 2013). As of December 27, 2017, this facility had 2,441 male inmates (CDCR 2017). The CCCC is a major employer in the City (California City 2009). Staffing levels at the facility fluctuate

Low-medium security

according to the number of inmates, with current staffing estimated at approximately 620 persons (Committee 2016).

The correctional facility has nine buildings with a total floor area of 510,980 square feet (Kern County Assessor-Recorder 2018) and a bed capacity for approximately 2,560 inmates (California City 2014). The facility is surrounded by two rows of perimeter fencing and a perimeter road, with a third row of fencing around the northern two-thirds of the facility.

2.3.2 ADJACENT UNDEVELOPED LAND

Areas west of the site include the CCCC and undeveloped land that are designated as Controlled Development, Public Parks and Recreation and Public Schools. Farther west is also undeveloped land designated as Controlled Development, Public Parks and Recreation and Public Schools.

The 39.6 acres of undeveloped land at the southwestern boundary of the site was approved in 2006 for the development of a 550-bed Modified Community Corrections Center or a 1,596-bed detention center, as an expansion of the CCCC. The detention center option was revised to a 2,200 bed correctional facility and approved by the City in 2009. At this time, 36.5 acres of this area has been fenced and cleared of native vegetation in compliance with existing permits but there is no set time frame for construction of this approved facility.

South of the site is vacant desert land consisting of 10- to 40-acre parcels that are designated as Estate Density Residential (1 du/2 acres). A small hill is located southwest of the site, south of Lindberg Boulevard, east of 145th Street, and north of George Boulevard. Approximately 0.5 mile to the south of the Project site is the City limits, which follows the alignment of George Boulevard (an east-west dirt road 0.5 mile south and parallel to Lindberg Boulevard). Land farther south is public land owned by the BLM within the unincorporated area of the County (BLM 2018).

East of the site is vacant desert land that has been subdivided into residential lots that are two acres or more in size and designated as Estate Density Residential (1 du/2 acres). Roads are rough-graded without pavement and no residences have been built.

North of the site is an approximately 640-acre undeveloped parcel that is owned by BLM and bisected by Twenty Mule Team Parkway. This parcel includes a City-owned water tank and booster pump station (BPS) site, north of Twenty Mule Team Parkway. Two areas at the southern section of this parcel are designated as Conservation Land (immediately north of the site and the CCCC), with the rest of the parcel designated as Controlled Development, Public Parks and Recreation and Public Schools.

2.3.3 ADJACENT UTILITY INFRASTRUCTURE

Utility infrastructure near the site that would serve the Project include:

Water Lines and Storage Tank – The California City Water Department provides water services from groundwater resources and imported water from the State Water Project through the Antelope Valley East Kern Agency (AVEK). An existing 12-inch diameter water line is located along the Virginia Boulevard right-of-way from the CCCC to Twenty Mule Team Parkway that would provide service to the Project site.

Sewer Lines – The City provides wastewater collection and treatment service through a system of sewer lines that convey wastewater to the City's wastewater treatment plant (WWTP) on Nelson Drive. The Project would connect to the 18-inch pipeline on Twenty Mule Team Parkway at 145th Street.

Power Lines – SCE provides electrical power services to the area. A 33-kilovolt underground electrical power line is located along Virginia Boulevard, but ends approximately 320 feet north of Gordon Boulevard on the east side of Virginia Boulevard. The power line on Virginia Boulevard provides energy to the CCCC and ties to the power line on Twenty Mule Team Parkway.

Gas Lines – SoCalGas provides natural gas services to the City but there are no gas lines or regulator stations near the Project site. Based on preliminary information from SoCalGas, the proposed Project would connect to gas service at the intersection of Yerba Boulevard and California City Boulevard.

Telecommunication Lines – Existing telephone lines owned by Frontier Communications are located along Virginia Boulevard and serve the CCCC. Wireless services are available in the area from Sprint, AT&T, and Verizon.

2.4 <u>CUMULATIVE DEVELOPMENT</u>

Section 15130 of the California Environmental Quality Act (CEQA) Guidelines states that cumulative impacts shall be discussed in an EIR where identified environmental impacts are potentially "cumulatively considerable", which is defined in Section 15065(a)(3) as occurring when "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".

Section 15130(b)(1) of the State CEQA Guidelines describes two allowable methods to determine the scope of other projects to be considered in the cumulative impact analysis, as follows:

- (1) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- (2) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

This EIR uses the second method for determining cumulative impacts, which considers the impacts of future growth and development in the City as part of the cumulative analysis. In consultation with the City of California City, growth projections in the City's General Plan assume a growth of 1.8 to 2.2 percent from 2010 to 2020, which is slightly lower than the Kern County Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) growth projections of 2.0 percent population growth and 2.4 percent household growth through 2040 (KCOG 2014). While the City's General Plan assumed a 1.8 to 2.2 percent growth at the time of preparation, the City has indicated that future growth has slowed. While no specific developments have been proposed near the Project site, the City has previously approved the development of a 550-bed modified corrections center or 2.200-bed correctional center on 36.5 acres to the southwest of the Project site and south of the CCCC. Any development proposals in Kern County near the City are not expected to have the potential to contribute to the cumulative impacts that may occur with the Project due to distance from the Project site to the nearest City-County boundary. Thus, the cumulative impacts associated with the Project, the adjacent 36.5-acre 550-bed modified corrections center or 2,200 bed correctional center, and an average 0.84 percent annual growth in other areas of the City is generally used in the cumulative impact analysis (California City 2020).

Section 15130(b)(3) of the State CEQA Guidelines states that "lead agencies shall define the geographic scope of the area affected by the cumulative effect and provide a reasonable

explanation for the geographic limitation used". There are environmental issues whose relevant geographic scope for purposes of cumulative impact analysis may be larger or smaller and may be defined by local, regional, or State agency jurisdiction or by environmental factors. One example is the geographic scope of cumulative air quality impacts, which encompasses the Mojave Desert Air Basin. This air basin is larger than the City of California City and is used in the analysis of cumulative air quality impacts.

Conversely, the geographic scope of cumulative aesthetic impacts is limited to anticipated development immediately adjacent to the Project site that share viewsheds or lines of sight with the site. Therefore, consideration of future developments near the Project site (i.e., the modified community corrections facility or detention center to the west) would provide a more relevant discussion of the cumulative aesthetic impacts of the Project. Where the geographic scope of the cumulative impact analysis under each issue varies from the City, this is noted at the start of the cumulative impact analysis under each issue.

Each environmental issue in Section 4.0 of this EIR provides a "cumulative impacts" subsection that includes the issue-specific cumulative impact analysis. Section 15130(b)(1) of the State CEQA Guidelines states that the cumulative impact discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the Project alone, and should focus on the cumulative impact to which other projects contribute.

This EIR considers local and regional programs directed at mitigating the cumulative impacts of growth and development, such as those instituted for urban runoff related to water quality impacts. Where there is an issue-specific geographic scope or an applicable regional program, these are discussed within the cumulative impact subsection of each environmental issue addressed in Section 4.0 of this EIR.

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SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT BACKGROUND AND NEED

The Project Applicant, CoreCivic, owns the California City Correctional Center (CCCC) that is located at 22844 Virginia Boulevard within the City of California City (City) on approximately 65.4 acres at the southeastern corner of the intersection of Virginia Boulevard and Gordon Boulevard. While the CCCC is privately-owned, it is currently leased to and operated by the California Department of Corrections and Rehabilitation (CDCR). The 2,304-bed CCCC began operations in 2000 and originally housed inmates for the U.S. Department of Justice, Federal Bureau of Prisons, and in 2013, the CDCR leased the facility. In 2016, approximately 620 staff were employed at the CCCC (Committee 2016).

In addition, CoreCivic has obtained approvals for the construction of a 2,200-bed prison facility on 39.6 acres situated immediately south of the CCCC. This property has not yet been developed, although it is fully entitled for development, has a perimeter fence and has been cleared of vegetation in compliance with prior permits. Upon completion, this facility may be operated under a federal agency contract, or leased to the public sector for future operation, or another private operator.

The proposed Correctional Facility at California City (CFCC) (also referred to in this EIR as the proposed Project or Project) is located within the remaining 216.5 acres in the eastern portion of the property owned by CoreCivic (Assessor's Parcel Number 350-031-02). Exhibit 3-1, Preliminary Site Plan, presents the juxtaposition of the proposed216.5-acre CFCC Project Site and the adjacent CCCC and planned 39.6-acre Corrections Center.

The nearest occupied land to the Project site is Borax Bill Park, an outdoor recreation facility located at 16363 Twenty Mule Team Parkway, located approximately 1.4 miles to the northeast of the Project Site. The proposed CFCC is consistent in use, character, and function with the adjacent CCCC and planned 39.6-acre Corrections Center, and the site is under the same ownership as adjacent existing and approved detention facilities. Based on these factors the Project site was determined to be an appropriate location to accommodate potential future demands for secure correctional/detention facilities. While CoreCivic has no existing contract with federal or State agencies that could eventually utilize the proposed Project, the need for additional correctional facilities to meet future inmate/detainee housing needs could be realized.

3.2 PROJECT GOAL AND OBJECTIVES

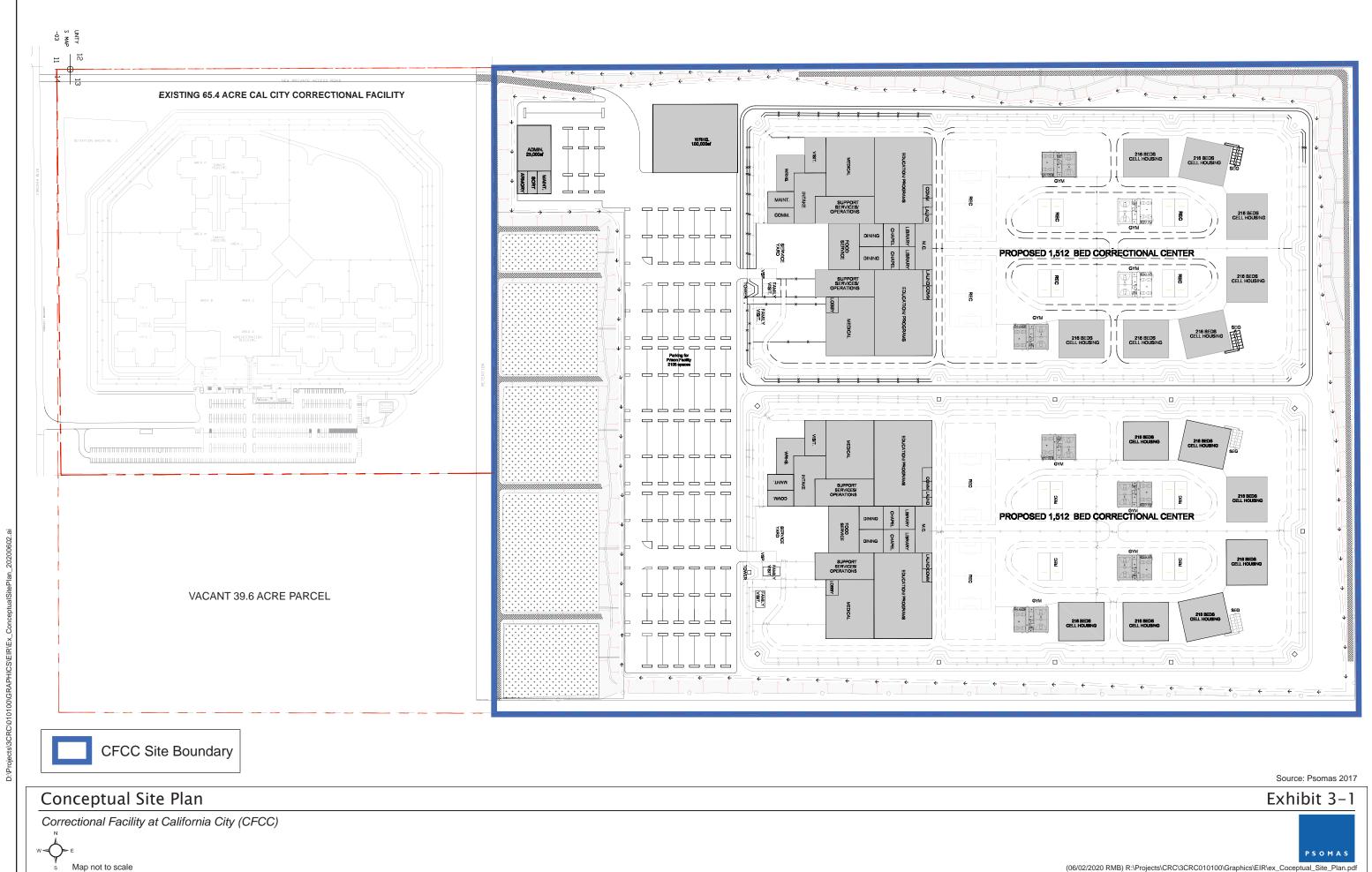
3.2.1 PROJECT GOAL

To provide a secure correctional facility that meets the needs of potential federal and/or State agencies and provide adequately sized and constructed facilities for housing, administration, food and dining services, medical services, recreation, family visitation, warehouse/utilities, maintenance equipment, and programs such as education, treatment, and/or vocational training.

3.2.2 PROJECT OBJECTIVES

The objectives of the Project are as follows:

1. To provide secure facilities that satisfy the standards and requirements of various potential end-users, including but not limited to the Federal Bureau of Prisons (BOP); U.S. Department of Homeland Security Immigration and Customs Enforcement (ICE); United



(06/02/2020 RMB) R:\Projects\CRC\3CRC010100\Graphics\EIR\ex_Coceptual_Site_Plan.pdf

- States Marshals Service (USMS) and/or California Department of Corrections and Rehabilitation (CDCR).
- 2. To provide facilities that satisfy the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum-, low-, medium-, and high-security.
- 3. To maximize the opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective housing of inmates by including sufficient space for programming and support facilities within a secure and monitored environment.
- 4. To maximize the opportunities for reducing overcrowding in federal and/or State prisons/detention centers according to the applicable standards for rated capacity.
- 5. To develop correctional/detention facilities in an appropriate location that reduces the potential for land use conflicts; minimizes traffic, lighting, and noise impacts to sensitive land uses and urban centers, and avoids environmentally sensitive resources.
- 6. To provide secure and humane housing of the targeted inmate or detainee populations in facilities that are safe and secure for the inmates, staff and community residents and that address American Correctional Association (ACA) standards for adult male facilities.

3.3 PROJECT DESCRIPTION

CoreCivic proposes to construct two separate but adjacent correctional centers with a total of 3,024 beds on approximately 216.5 acres of a 320-acre property located south of the alignment of Gordon Boulevard, east of Virginia Boulevard and north of Lindberg Boulevard. As shown on Exhibit 3-1, the Project would include two separate facilities with up to 1,512 beds each, with a shared administration building and common parking area. The proposed structures, site improvements, and off-site utility infrastructure upgrades/extensions are described below.

3.3.1 CORRECTIONAL FACILITY STRUCTURES AND FUNCTIONS

On-site Facility Structures

The Project involves the construction of a one-level, 1,512-bed correctional center on the northern portion of the site and an identical 1,512-bed correctional center on the southern portion of the site. Building heights would not exceed 45 feet (ft). Each facility contains seven secure housing structures that are located in a semi-circular arrangement around a central open area with indoor and outdoor recreational facilities and open areas. West of the housing and recreational area would be a central building for various inmate services and programs, such as intake, food service, medical, education, maintenance, laundry, chaplain, library, visitation, and other support areas. A common surface parking area would be located between the buildings on the east and a series of five retention basins on the west, with an administration building and warehouse building near the access road to the Project site.

Each correctional center would include the following:

- Seven secure housing buildings, constructed of precast concrete panels, would house up to 216 inmates each. Housing units would be equipped with staff and inmate support facilities, including meeting areas, restrooms and a commissary. Two of these buildings would also have attached segregation units.
- The outdoor area at the center of the housing buildings would be segregated/fenced into four recreation areas that would each include game courts, gymnasiums (with full and half

basketball courts, restrooms, and storage/maintenance rooms), fixed exercise stations, and a running track/walkway around the perimeter. Two additional large, outdoor recreation areas (e.g., soccer fields and/or game areas) would be provided west of this outdoor area.

- A central program building would provide space for intake and support areas, educational
 programs, libraries, chapels, medical services, food service and dining areas, laundry
 areas, commissaries, visitation areas, maintenance, storage and communication rooms,
 a lobby, two family visitation areas, and other ancillary uses. The perimeter of the central
 building would be surrounded by a walkway that contains several gates to restrict access.
- A double perimeter fence would surround each facility, with rows of razor wire along the
 top and bottom of each fence. A third inner electro-fence may be installed per customer
 requirements. Twelve observation posts/towers would surround each facility just outside
 of the perimeter fences, along with an outer perimeter road. The perimeter of each facility
 would also be equipped with a motion detection system and nighttime security lights on
 various height masts/posts up to 100-feet tall. The primary objective of exterior lighting will
 be to illuminate entrances and to provide site lighting for security.

The western section of the site includes facilities shared by both proposed correctional centers, including:

- An administration building for management offices, armory, maintenance, sorting and storage areas would be located at the northwestern corner of the site. This building would have a 100,000-square-foot (sf) warehouse for equipment and supply storage and a 25,000 sf administration area.
- A common parking lot with 2,105 surface parking spaces would be located immediately south of the administration building, extending the entire length of the property to the southern site boundary.
- A new private two-lane road would provide access to the parking lot and the Project Site along the alignment of Gordon Boulevard and starting from Virginia Boulevard to the northwestern corner of the site.
- A series of five retention basins would be located along the length of the western site boundary to accommodate surface water runoff from the rest of the site.
- A maintenance access road, up to 15-feet wide, would surround the developed pad to provide access for the manufactured slopes, retention basins, and drainage structures.

The 216.5-acre Project site would be improved to include an approximate 159-acre building pad to accommodate the facilities and structures described above, manufactured slopes with ancillary drainage improvements along the perimeter of the building pad. No improvements are proposed for the City's road rights-of-way located along the north, south or east edges of the 216.5-acre Project site.

Facility Functions

Administrative and Security: Primary administrative functions would generally include staff services, central control, and armory. Staff would have access to lockers, a break room/multipurpose room, and showers. Central control would be operational 24 hours per day, 7 days per week. Central control activities would generally include observing and controlling the facility's entrances and exits; monitoring Closed Circuit Television (CCTV); monitoring fire and alarm systems; operating central communication systems; operating remotely controlled doors and gates; and monitoring the perimeter. Alarms will be located at key locations and an uninterrupted

power source will connect to all the electronic security systems, with back-up emergency generator power supplied for 72 hours. The Public Address (PA) systems will be primarily utilized during emergency situations requiring a mass response to a given incident. Most of the staff communication within the proposed facilities will be conducted via handheld radios, landlines and/or local intercoms and armed staff will be generally limited to perimeter patrol.

Intake/Inmate Processing: The intake area would accommodate intake screening and the transport of inmates. In general, functions include holding and staging inmates for transport to the courts and other facilities.

Visitation and Family Visitation: The Project includes a separate building for family visitation adjacent to the entry vestibule. Visitation will occur at the facility on weekends and holidays and will be based on space availability. The facility is expected to accommodate approximately 200 visitors each weekend, and approximately 50 visitors on the major holidays in which visitation is allowed. The hours of visitation are generally between 8:30 AM and 3:00 PM. Video visitation may be implemented depending on contract and other requirements.

Education and Programs: The Project includes space to accommodate various classes and activities to serve the inmate population. Specific programs are unknown at this time, but may include General Educational Development (GED), Adult Basic Education (ABE), vocational training, and other educational programs, substance abuse counseling, career counseling, and life skills training. These programs would be provided in various facilities such as classrooms, computer labs, vocational classrooms and/or counseling areas.

Medical Services: Medical services will include facilities that are equipped to accommodate licensed medical personnel 24 hours per day, 7 days per week. The medical clinic will have multipurpose exam rooms for routine medical examinations; and provide radiological, dental, phlebotomy and urgent care services. In the event that an inmate's medical conditions warrant a higher level of care, the correctional services staff will facilitate transportation to area hospitals. Mental health clinicians, social workers, and psychologists and psychiatrists will also be available.

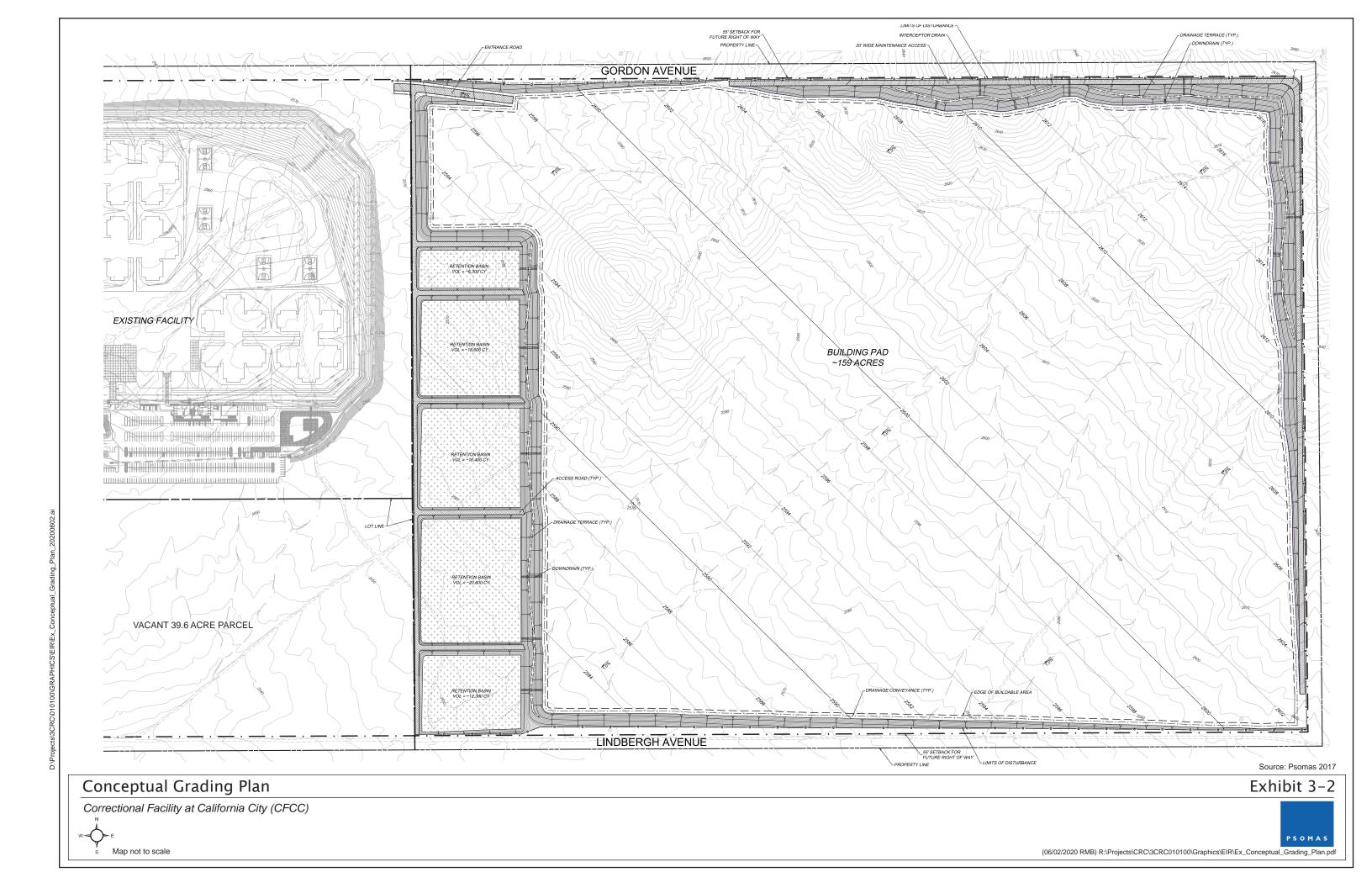
Commissary and Laundry: The kitchen, dining area/commissary, and food service space will be included in the main building. Laundry will be processed on-site.

On-Site Utility Infrastructure

The Project site is currently undeveloped with no water, wastewater, storm drainage, or utility infrastructure. As such, development of the Project site will require mass grading to create a building pad, installation of new on-site stormwater control facilities and the extension of existing water, wastewater, natural gas, and electrical infrastructure into the Project site.

Exhibit 3-2, Conceptual Grading Plan, depicts the Project site in the graded condition, including the approximately 159-acre graded building pad, entry access road, 15-foot wide perimeter maintenance road, stormwater conveyance facilities, and retention basins. Grading would be conducted in accordance with the California City Grading Code. The anticipated earthwork on the Project site would be balanced on-site, requiring the movement of approximately 1,900,000 cubic yards (cy) of cut and fill material, not including any overexcavation that may be required for reengineering and recompaction of fill material. No import or export of soils are anticipated.

Under existing conditions, stormwater generally percolates into the ground with runoff sheetflowing across the site in a general westerly and southwesterly direction. With the proposed Project, stormwater would be directed at a one percent slope toward the southwestern portion of graded pad area. Drainage conveyance infrastructure would encircle the perimeter of the



improved Project site, delivering stormwater to one of the proposed five on-site retention basins that have a combined capacity of 71,200 cy of volume. Stormwater would be captured in these retention basins for infiltration and/or evaporation. No off-site storm drainage improvements are needed to serve the Project.

Potable water would be conveyed to the Project site via a new 12-inch diameter water line at the access road in the northwest corner of the site along the Gordon Boulevard extension shown on Exhibit 3-3 and would serve the proposed prison facilities through a network of on-site water distribution lines.

The Project can be served by two alternative sewer alignments which would ultimately transmit sewage from the Project site to the existing pipeline in Twenty Mule Team Parkway. The two possible on-site sewer line alignments are depicted on Exhibit 3-3. Sewage flows from on-site correctional facilities would be contained within a network of sewage pipes that converge in the southwest area of the Project site, where the collected sewage would be run through an onsite grinder. From this point, one alternative sewer alignment (Option 1) would convey sewage via a new on-site 12-inch diameter sewer line that would extend between two of the retention basins, and continue west via gravity flow westerly along the south edge of the adjacent existing CCCC parking lot towards the Twenty Mule Team Parkway main line. The other alternative sewer alignment (Option 2) requires an onsite sewer lift station to pump sewage from the southwest area of the Project site (lowest point on the site for gravity flows), to the northwest corner of the site to the Project access road in a pressurized force main line, where it would extend westward offsite along the Gordon Road alignment.

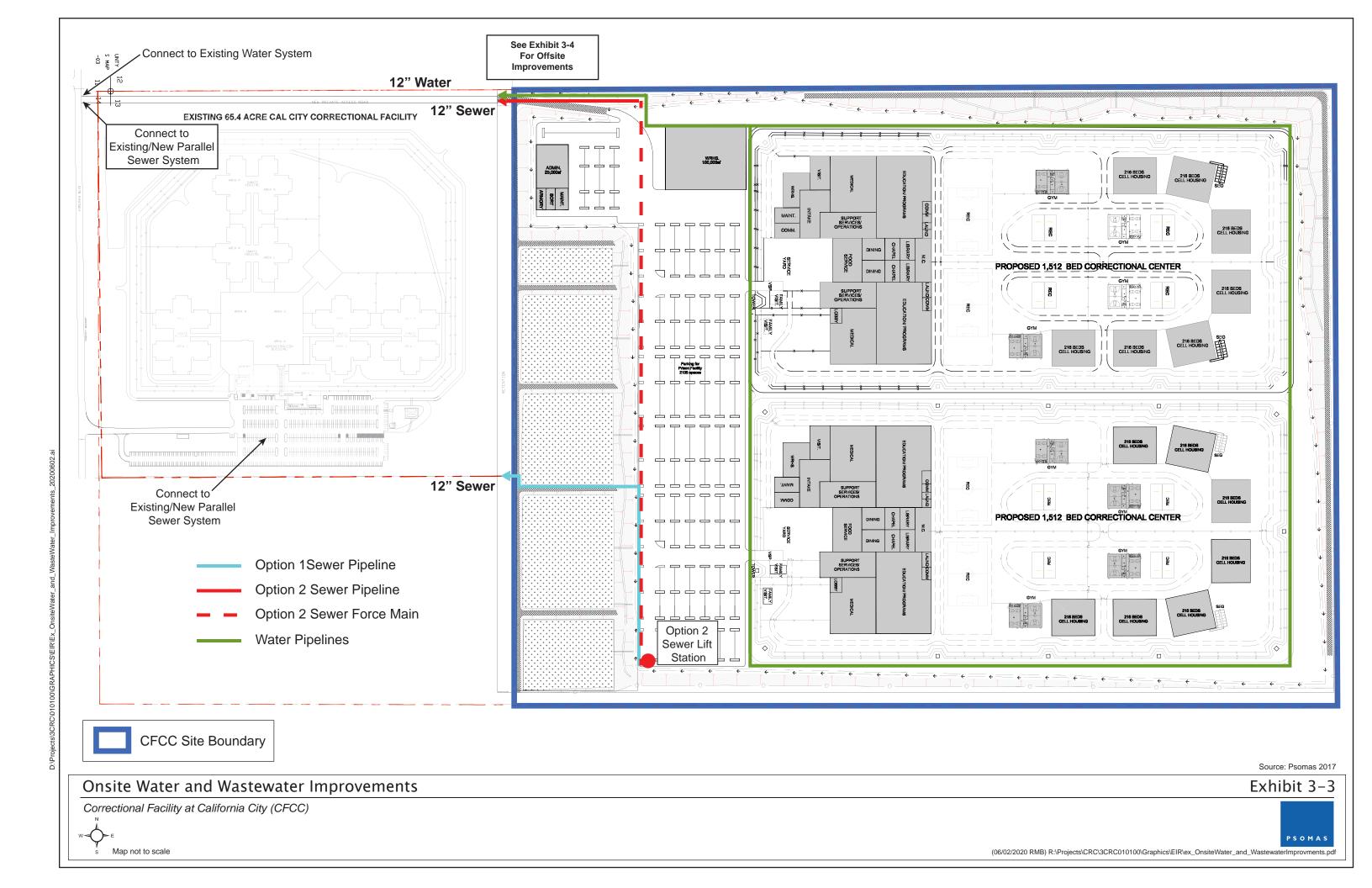
Off-Site Infrastructure Improvements

Water Infrastructure

Exhibit 3-4a, Offsite Water Improvements, provides an overview of existing water infrastructure as well as the Project's required offsite water improvements. The City's existing water system includes approximately 1 mile of 12-inch diameter water line along Virginia Boulevard and Twenty Mule Team Parkway that serves the existing CCCC from a booster pump station (Phase 1 BPS) connected to a 2.5-million-gallon water tank (Phase 1 tank) located off of Twenty Mule Team Parkway approximately 0.7-mile north of the Project site. The Phase 1 BPS consists of two 50 horsepower pumps, each with a design flow of 500 gallons per minute (gpm), which pump potable water to the existing CCCC as well as the Phase 2 tank. Two additional booster pump stations provide potable water from the Phase 2 Tank to the Silver Saddle Ranch community approximately 7.2 miles northeast of the Project site.

The required maximum day capacity for the Phase 1 BPS must be increased to approximately 1,040 gpm in order to serve the proposed Project, in addition to the existing demands and the approved/yet to be built 2,200 bed prison project. Therefore, an additional 550 gpm pump is required at the Phase 1 BPS. The Phase 1 BPS is located within an existing structure with a concrete pad that is capable of accommodating the new pump; no grading or earthwork is anticipated for this pump installation (Psomas 2017a).

The existing 12-inch water pipeline from the Phase 1 BPS has sufficient capacity to meet the demand of the proposed Project. However, to connect the water supply from this line to the Project site, a 12-inch pipeline would be extended eastward from the line in Virginia Boulevard along the proposed access road and the eastern extension of the Gordon Boulevard alignment, which traverses the northernmost boundary of the adjacent CCCC facility as depicted on Exhibit 3-4a.

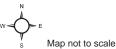


Source: Psomas 2017

Offsite Water Improvements

Exhibit 3-4a

Correctional Facility at California City (CFCC)



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Sewer Infrastructure

Pipeline Conveyance

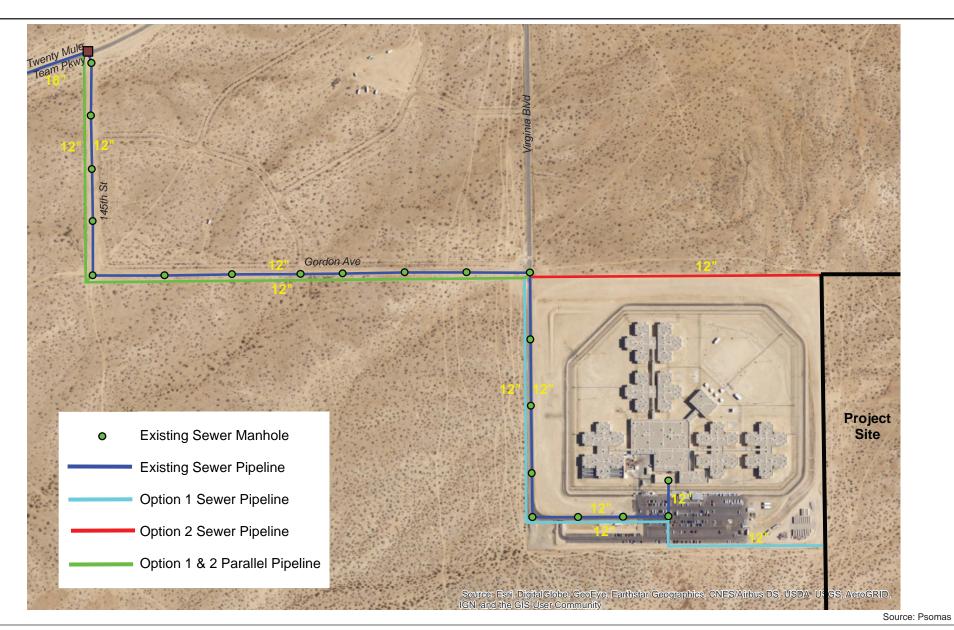
Exhibit 3-4b, Offsite Wastewater Improvements, provides an overview of existing sewer infrastructure as well as the Project's required offsite sewer pipeline improvements. The City's sewer system serves the existing CCCC which discharges from the site into a 12-inch sewer pipeline within the parking lot located in the southern end of the property. The sewage is run through an onsite grinder initially and then transmitted through approximately 8,500 ft of 12-inch pipeline into an 18-inch sewer pipeline in Twenty Mule Team Parkway at 145th Street. The 12-inch pipeline conveying flows from CCCC extends west to Virginia Boulevard, then north along Virginia Boulevard to Gordon Boulevard, west along Gordon Boulevard to 145th Street and north on 145th Street to the connection at Twenty Mule Team Parkway. The sewer pipelines within the CCCC parking lot, Virginia Boulevard, Gordon Boulevard, and 145th Street do not have sufficient capacity and are not adequately sized to accommodate the sewer flows from the proposed Project in addition to the sewer flows from the neighboring approved 2,200-bed prison project.

The 18-inch pipeline in Twenty Mule Team Parkway extends southwesterly approximately 2 miles then increases in diameter to 24-inches. The 24-inch pipeline continues southwesterly along Twenty Mule Team Parkway another 1.4 miles to near the intersection with Randsburg-Mojave Road. At this point the pipeline turns westerly and increases in diameter to 27-inches where it continues to the City's 1.0 million gallon per day (MGD) Wastewater Treatment Plant (WWTP) on Nelson Drive. This 18-inch to 27-inch diameter pipeline is adequately sized to accommodate the sewer flows from the proposed Project, as well as the sewer flows from the approved 2,200-bed prison project and other known cumulative developments along the route, and no upgrades to this pipeline are required (Psomas 2017b).

The Project can be served by two alternative offsite sewer alignments that would transmit sewage from the Project site to the pipeline in Twenty Mule Team Parkway as depicted in Exhibit 3-4b. Based on the existing capacity limitations described above, both off-site alternatives would require installing 12-inch diameter pipe parallel to the existing sewer pipe in Gordon Boulevard, west of Virginia Boulevard.

One alternative alignment (Option 1) would connect the new 12-inch pipeline from the Project boundary, through the southern portion of the CCCC property and along the southern edge of the CCCC parking lot. New trenching along the existing sewer pipelines within Virginia Boulevard, Gordon Boulevard, and 145th Street would be required for the new parallel 12-inch diameter pipeline needed to transmit the Project sewage to the pipeline in Twenty Mule Team Parkway. The benefit of this alternative is avoiding installation and long-term operation of a sewer lift station on the Project site.

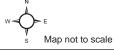
The second alternative alignment (Option 2) would connect the new 12-inch pipeline from the northern Project boundary, through the northern boundary of the existing CCCC site, extending westward within the proposed Gordon Boulevard access road alignment. This would require new off-site trenching along the Gordon Boulevard right-of-way to the Project access road. The benefit of this alternative is avoiding additional off-site trenching within the CCCC property and up Virginia Boulevard to the Gordon Boulevard alignment. As an alternative to installing parallel pipelines to meet flow capacity requirements, an approximate 28,000-gallon holding tank could be constructed onsite, along with the sewer lift station and force main for Option 2, in order to pump and discharge sewage from the site during off-peak hours and potentially eliminate the need for constructing parallel sewer lines on Gordon Boulevard and 145th Street.



Offsite Wastewater Improvements

Exhibit 3-4b

Correctional Facility at California City (CFCC)





City Wastewater Treatment Plant

The City's WWTP has an approved treatment capacity of 1.0 MGD based on permits issued by the Lahontan Regional Water Quality Control Board. According to City staff, the treatment facility is currently operating at approximately 0.65 MGD and has reached its effective maximum operating capacity, without factoring in the future wastewater flow of approximately 0.20 MGD from the approved but not yet constructed 2,200-bed prison facility and flows from other planned/permitted projects in the City. Therefore, in order to accommodate the proposed Project's estimated sewage flows of 0.28 MGD, additional treatment and disposal/storage/reuse capacity will be required at the City's WWTP, including increased seasonal storage and/or percolation pond capacity to accommodate the Project's expected sewage flow. When considering the Project's future wastewater flow of 0.28 MGD in combination with other planned and approved projects in the City, an increase of approximately 0.5 MGD of additional treatment and disposal/storage/reuse capacity will be required at the City's WWTP for cumulative development purposes.

An assessment of the City's WWTP was conducted which evaluated the existing operating conditions and provided recommendations for potential improvements that would restore the WWTP's treatment capacity its 1.0 MGD rated capacity and add needed redundancy so the City can confidently meet its permit requirements and allow for future expansion to 1.5 MGD to accommodate the flows associated with General Plan growth, septic system conversions and other developments (Hazen 2019). Two sets of recommendations were developed, (1) functional improvements and (2) reliability improvements, which cover items of work needed to enable the WWTP to function at its existing permitted and potentially expanded treatment capabilities. A preliminary implementation schedule and work activity estimate was prepared for the recommended improvements (Psomas 2020).

Functional improvements are identified as needed at facilities that are not properly functioning and require replacement to restore the desired level of plant performance; whereas, Reliability improvements are identified as needed at facilities that are currently functioning but are in imminent danger of failure and should be replaced to maintain the security of plant performance. Functional improvements at the City WWTP would occur with the aeration basins, clarifiers, tertiary filtration system, and sludge dewatering. While reliability improvements would occur with several operational systems associated with disinfection, grit removal, electrical and control, pumping, and solids dewatering. Additionally, improvements to expand the capacity and operational efficiency of the existing percolation and recycled water ponds would occur which would also enhance the overall operational capacity of the WWTP. All recommended improvements would occur within the current boundaries of the WWTP site and would not encroach into adjacent property. Importantly, the Project would contribute approximately 0.28 MGD of new demand to the City's WWTP operation; however, improvements are required to provide approximately 0.5 MGD of additional capacity at the facility as noted above. The proposed Project would thus be responsible for its pro-rata share of impacts related to WWTP improvements based on the anticipated sewage flow of 0.28 MGD.

Electricity

Southern California Edison (SCE) provides electrical power services to the Project area and has a 33-kilovolt vault and underground line along Virginia Boulevard that serve the CCCC. Electrical power service to the Project would be provided through connection to the existing vault located on the east side of Virginia Boulevard, approximately 320 feet north of Gordon Boulevard or through connection to the existing vault in the CCCC parking lot. If the proposed Project connects to the vault in Virginia Boulevard, a new underground power line would be installed along Virginia Boulevard, south to Gordon Boulevard and east along the new access road to the Project site. If

the proposed Project connects to the vault in the CCCC parking lot, a new underground power line would be installed along the south edge of the CCCC parking lot to the Project site. Underground power lines would then extend to individual buildings on the site. Back-up generators would be located on the Project site to ensure continuous power to the Project in the event of an SCE power failure. No off-site SCE facility upgrades are anticipated. Refer to Exhibits 2-1 and 2-2 for the location of the preliminary offsite utility alignments.

Natural Gas

Southern California Gas (SoCalGas) provides natural gas service to the Project area but currently no gas lines exist near the Project site. Natural gas service to the Project would require the extension of a 6-inch diameter gas line from the intersection of Yerba Boulevard and California City Boulevard. The new gas line and related equipment (e.g., pressure regulator station) would be constructed within the disturbed City road right-of-way from Yerba Boulevard east along California City Boulevard for approximately 3.5 miles to Randsburg Mojave Road, then northeast along Randsburg Mojave Road to its intersection with Twenty Mule Team Parkway. The new gas line would continue along Twenty Mule Team Parkway, turning south on 145th Street, and then east along Gordon Boulevard and onward along the proposed access road to the Project site. Gas lines would then extend to individual buildings on the site. The off-site gas line to serve the proposed Project would be approximately 9.3 miles in length. Refer to Exhibits 2-1 and 2-2 for the location of the preliminary offsite utility alignment. An alternative gas line route (shorter in length) is also discussed in Section 5.4.4 of this DEIR.

Communication Systems

Frontier Communications (formerly Verizon) provides telephone service in the Project area. Telephone lines would be extended underground from the existing line on Virginia Boulevard, along the proposed access road, and then extend to individual buildings on the site.

3.3.2 PROJECT CONSTRUCTION

The Project would be designed to meet American Correctional Association standards and all applicable building codes and regulations. The Project would be implemented in two phases. Phase 1 would include the construction of one of the 1,512-bed correctional centers, which is anticipated to overlap with the construction of the off-site infrastructure, including the improvements at the City's WWTP and installation of an additional pump at the Phase 1 BPS. Table 3-1 provides an overview of the anticipated sub-phases for construction activities at both the Project site and at the off-site WWTP. Phase 1 is anticipated to be entirely completed and occupied prior to the commencement of Phase 2, unless facility demands dictate otherwise.

TABLE 3-1
POTENTIAL PHASE 1 CONSTRUCTION SCHEDULE

	2024				2025				2026			
Construction Phases	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project Site Construction (On-Site)												
Site Preparation - Grubbing			*	*								
Grading			*	*	*							
On-site and Off-site Underground Utility Construction*				•	•	•	•					
Building Construction				*								

^{*} includes on-site and off-site sewer and wastewater treatment plant upgrades, gas, power, water, telephone, and telecommunication lines and facilities, with construction of the off-site gas lines and facilities needed to serve the Project undertaken by the SoCal Gas or their designated contractor.

Because both Phase 1 and Phase 2 would occur adjacent to occupied facilities, the impact analyses contained in Section 4.0 of this Draft EIR consider the proximity of sensitive receptors (i.e. inmates are considered residents) to construction and operational activities. Construction activities are anticipated to occur six days per week over the course of an 11-hour workday (7:00 AM to 6:00 PM) and as otherwise allowed in the City's Noise Ordinance. Because the Project site contains areas of relatively shallow bedrock that may not be ripped by mechanical means during the grading phase; blasting may be required. The specific limits of blasting will be determined with preparation of a comprehensive geotechnical analysis to be conducted during detailed project design.

CoreCivic does not have a specific client or corresponding occupancy date for either phase of the proposed Project, Therefore, while construction activity durations presented are roughly accurate, the proposed Project scheduling is provided for planning and environmental analysis purposes only. Phase 1 construction activities could potentially begin in January 2024, and be completed by December 2025, totaling approximately 24 months. Occupancy of Phase 1 of the Project, if construction were to be completed in December 2024, would be expected to occur in early 2025.

The timing of the construction and occupation of Phase 2 is unknown. However, for the purposes of this Draft EIR and as illustrated in Table 3-2 below, Phase 2 is assumed to begin within 6 to 8 months of completion of Phase 1. Site preparation, clearing, grubbing, and rough grading will have occurred during Phase 1 and is not required for Phase 2. Additionally, all off-site utilities and improvements at the WWTP will be completed. As such, the total construction schedule for Phase 2 is expected to require approximately 18 months.

TABLE 3-2
POTENTIAL PHASE 2 CONSTRUCTION SCHEDULE

	2026				2027				2028			
Phase	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
On-site Underground Utility Construction					•							
Building Construction					*	*	*	*	*	*		

For on-site construction activities during Phase 1 and Phase 2, it is estimated that an average of 96 construction workers would be on-site during construction activities, with a peak time period of approximately 3 months when as many as 238 construction workers may be on-site. Based on the construction contractor's experience and the remote location for the Project site, it is estimated that approximately 25 percent of the construction workers would carpool.

3.3.3 PROJECT OPERATIONS

As many as 3,024 inmates could be housed at the Project. Staffing would be on-site for seven days per week and would include security/sworn staff, civilian staff, counselors, maintenance personnel, physicians, registered nurses, contractors, and other employees. The Project would be staffed by approximately 500 to 600 full-time equivalent employees or a total of 1,000 to 1,200 individuals, depending on the operating scenario and the occupancy rate. Approximately 65 percent of the staff will be working during the morning shift (6:00 AM to 2:00 PM); with approximately 25 percent of staff during the afternoon shift (2:00 PM to 10:00 PM); and approximately 10 percent of staff during the evening shift (10:00 PM to 6:00 AM). Administrative and medical staff would work from 8:00 AM to 5:00 PM for seven days per week.

3.3.4 FUTURE INMATES

The Project will provide a total of 3,024 beds for male inmates, depending on future agreements with governmental agencies. Inmates housed at the Project may include those under federal and/or State custody. The Project will be designed and constructed according to the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum, low-, medium- and/or high-security.

As part of standard facility operations, inmates would be transported to and from the CFCC on a weekly basis, although more frequent transports may occur. Inmates would be brought to and from the Project site in a secured van or other vehicle for the expressed purpose of providing a safe and secure transport for both inmates and officers.

3.4 <u>DISCRETIONARY ACTIONS</u>

3.4.1 LEAD AGENCY

The City, as the Lead Agency, is responsible for preparing the EIR and will review and consider the EIR in its discretion and approve, revise, or deny the Project with findings, as appropriate. The EIR will serve as the primary environmental document for implementation of the Project, including all required discretionary approvals for implementation. Discretionary actions to be considered by the City may include, but are not limited to the following:

- Approval of the CoreCivic CFCC Project, including approval of the City's Phase 1 BPS and Wastewater Treatment Plant upgrades and extension of City-owned sewer infrastructure to serve the Project (i.e., sewer lines and facilities).
- Certification of the Draft and Final Environmental Impact Report (EIR).
- Conditional Use Permit, as required by the City's Zoning Regulations for proposed governmental or quasi-governmental correction, probation or prison facilities and services in the RA district.

3.4.2 RESPONSIBLE AND TRUSTEE AGENCIES

The EIR will provide environmental information to responsible, trustee, and other public agencies that may be required to grant approvals or permits to facilitate Project implementation. These agencies may include, but are not limited to, the following, depending on future use:

- State Water Resources Control Board. For coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and other applicable requirements of the Clean Water Act.
- **State Fire Marshal.** For approval of building plans and for compliance with the California Fire Code as applicable.
- **Board of State and Community Corrections.** For approval of building plans for a State facility in accordance with Title 15 and Title 24 of the *California Code of Regulations* and inspection of the detention facility for compliance with State operating standards.
- California Department of Fish and Wildlife. For issuance of a Streambed Alteration Agreement for impacts to jurisdictional drainages, and issuance of an Incidental Take Permit for potential impacts to State-listed threatened or endangered species.
- Eastern Kern Air Pollution Control District. For approval of a Dust Control Plan during construction, and permits to operate pollution-generating construction equipment and other pollution-generating equipment at the CFCC, such as emergency diesel backup generators. An Authority to Construct may also be needed for the WWTP expansion, along with permits to operate any new equipment that would be installed. The additional pump at the City's Phase 1 domestic water BPS may also require a permit to operate from the Eastern Kern Air Pollution Control District.
- Lahontan Regional Water Quality Control Board.
 - For issuance of a Water Quality Certification for impacts to jurisdictional drainages, if applicable.
 - For issuance of new Waste Discharge Permit related to expansion of the existing WWTP.
- California City Fire Department. For approval of building and site plans in consultation with the State Fire Marshal for compliance with the California Fire Code as adopted by the City.
- California City Department of Public Works.
 - For approval of building and site plans for conformance with the City's Building Code and other building regulations, and for issuance of encroachment permits to construct improvements within City-owned property and public rights-of-way.
 - For approval of building and site plans for improvements to the City's booster pumping station, wastewater treatment plant, and wastewater utility infrastructure.
- Edwards Air Force Base. For clearance from the Edwards Air Force Base for the proposed Project and site improvements that would be located within the restricted airspace for the R-2508 Complex.

3.5 REFERENCES

- Hazen and Sawyer. 2019 (May 10). Technical Memorandum. Subject: California City Wastewater Treatment Plant. Los Angeles, CA: Hazen.
- Law and Justice Committee (2016). Summary of Activities. https://www.co.kern.ca.us/grandjury/finalreports/fy1516/lawjustice.pdf
- Psomas. 2020 (May 20). Memorandum. Subject: Summary Memorandum of Assumptions for Preliminary Schedule and Work Activity Estimate for the California City Wastewater Treatment Plant. Santa Ana, CA: Psomas.
- ——. 2017a (June 26). CoreCivic California City Correctional Facility Water Capacity Analysis. Santa Ana, CA: Psomas.
- ——. 2017b (August 18). CoreCivic California City Correctional Facility Sewer Capacity Analysis. Santa Ana, CA: Psomas.

SECTION 4.0 ENVIRONMENTAL ANALYSIS

Section 4.0 analyzes the potential environmental impacts associated with approval and implementation of the proposed Correctional Facility at California City (CFCC) (also referred to in this EIR as the Project or proposed Project). The environmental analyses within this section of the Environmental Impact Report (EIR) focus on the potential environmental impacts associated with construction and operation of the proposed Project, and the impacts of the associated offsite infrastructure and public facility improvements. This section of the EIR addresses the Project's potential short-term, long-term, direct, indirect, and cumulative environmental impacts.

The following environmental issues are subject to analyses:

- Section 4.1: Aesthetics
- Section 4.2: Agriculture and Forestry Resources
- Section 4.3: Air Quality
- Section 4.4: Biological Resources
- Section 4.5: Cultural Resources
- Section 4.6: Energy
- Section 4.7: Geology and Soils
- Section 4.8: Greenhouse Gas Emissions
- Section 4.9: Hazards and Hazardous Materials
- Section 4.10: Hydrology and Water Quality
- Section 4.11: Land Use and Planning
- Section 4.12: Mineral Resources
- Section 4.13: Noise
- Section 4.14: Population and Housing
- Section 4.15: Public Services and Recreation
- Section 4.16: Transportation
- Section 4.17: Tribal Cultural Resources
- Section 4.18: Utilities and Service Systems
- Section 4.19: Wildfire

Under each section, a summary of the methodology used for the analysis, including technical studies and/or other sources, is provided. This is followed by a discussion of the existing regulatory setting. Environmental conditions within the Project site and in the surrounding area are then presented to provide the baseline with which environmental changes from the proposed Project would be analyzed. The thresholds used to determine the significance of impacts follows.

Prior to the environmental impact analysis, Project Design Features (PDFs) and Regulatory Requirements (RR) are listed. PDFs are specific design elements incorporated into the proposed Project that are included in the Project's contractor specifications and final plans and would prevent the occurrence of, or reduce the significance of, potential environmental effects. Because PDFs have been incorporated into the Project, they do not constitute mitigation measures as defined by the California Environmental Quality Act (CEQA). However, PDFs are identified in the

Mitigation Monitoring and Reporting Program (MMRP) for convenience of tracking to ensure compliance monitoring.

RRs include applicable local, County, regional, State, or federal regulations that are required independently of CEQA review and also serve to prevent the occurrence of, or reduce the significance of, potential environmental effects. Typical RRs include compliance with the provisions of the California Building Code, Eastern Kern Air Pollution Control District rules, City requirements, and other regulations and standards.

An analysis of the potential environmental impacts that may result from the Project and proposed off-site infrastructure and public facility improvements follows. Where applicable, short-term construction impacts are addressed separately from long-term operational impacts where they would be different. Similarly, on-site impacts are addressed separately from off-site impacts where they are not the same. Otherwise, the impact analysis is assumed to encompass both construction and operational impacts and on-site and off-site impacts. The environmental analysis addresses each applicable impact threshold, and includes a discussion of cumulative impacts at the end. This impact analysis assumes the implementation of PDFs and RRs. Where a potentially significant environmental effect has been identified, Project-specific mitigation measures (MMs) are provided. Section 15126.4(a) of the State CEQA Guidelines requires lead agencies to consider all feasible MMs to avoid or substantially reduce a project's significant environmental impacts.

A summary of the significance of environmental impacts after compliance with the PDFs and RRs and implementation of the MMs, if any, are then stated for each environmental issue. References used in each section are listed at the end.

4.1 **AESTHETICS**

The analysis of Aesthetics identifies and evaluates key visual resources on the Project site and the surrounding area and determines the degree of visual impact that would be attributable to the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project). This section contains the following: (1) a description of the existing aesthetic character of the Project site and the surrounding area; (2) a description of views of the Project site; and (3) an analysis of the potential changes in visual quality, as well as the light and glare effects associated with implementation of the Project, as considered in the context of applicable regulatory requirements.

The assessment of visual and light and glare changes presented in this section is based on field reconnaissance, review of aerial photographs and site photographs, and an evaluation of the Project's preliminary site plan.

4.1.1 RELEVANT PROGRAMS AND REGULATIONS

<u>State</u>

California Scenic Highway Program

The California Scenic Highway Program by the California Department of Transportation (Caltrans) classifies highways meeting specific criteria as "scenic" throughout the State. The purpose of the program is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. According to Caltrans, "a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view" (Caltrans 2018a).

Review of the California Scenic Highway Mapping System shows that there are no officially designated Scenic Highways near the Project site or in Kern County. State Route (SR) 58 (from SR 14 near Mojave to Interstate 15 near Barstow) is an eligible Scenic Highway located approximately 10 miles south of the Project site. SR 14 (from SR 58 near Mojave to SR 395 near Little Lake) is also an eligible Scenic Highway located approximately 13.2 miles west of the Project site and at the western boundary of California City (Caltrans 2018b). The Project site is intermittently visible in the distant viewshed from these segments of SR 58 and SR 14,

City

California City General Plan

The California City General Plan identifies SR 58 and SR 14 as eligible State Scenic Highways that provide views of the desert landscape with Joshua trees and wildflowers. It mentions the economic benefits of designating Twenty Mule Team Parkway as a scenic highway but does not specifically call for its designation as such (California City 2009).

4.1.2 EXISTING CONDITIONS

The 216.5-acre Project site consists of undeveloped land immediately east of the California City Correctional Center (CCCC) that is located at 22844 Virginia Boulevard, in the central section of the City of California City. The site is part of the 321.5-acre parcel that is occupied by the CCCC. The Project would be developed on the central and eastern sections of the parcel, with the CCCC

at the northwestern section and vacant land for an approved 2,200-bed correctional center at the southwestern section of the same parcel,

Exhibit 2-3, Aerial Photograph, in Section 2.0, Environmental Setting, shows the location of the site in relation to adjacent lands. As shown, except for the CCCC, the site and the surrounding areas are largely undeveloped. Virginia Boulevard and Twenty Mule Team Parkway are paved, but other roads are unpaved (dirt roads).

On-Site Visual Character

The site does not support any structure and is visible from public roadways as part of the larger desert floor, with views of scattered scrub vegetation, rocks, and small shallow drainages. The site has a moderately sloping and undulating topography, with a flatter area at the southwestern section.

As shown in Exhibits 4.1-1a through 4.1-1c, Site Photographs, the Project site appears as part of the large expanse of vacant lands framed by distant buttes and mountains. With no abutting roads or development to the north, east and south, the boundaries of the site cannot be readily defined; only that it is immediately east of the CCCC.

Views of the site are limited to persons at or visiting the CCCC, travelers along Twenty Mule Team Parkway, and users of off-highway vehicles (OHV) that utilize the surrounding vacant lands. Future residential uses on subdivided land to the east of the proposed Project would also have views of the site.

Off-Site Visual Character

As shown in Exhibits 4.1-1a and 4.1-1b, Site Photographs, the Project site is located adjacent to the CCCC (to the west) and vacant lands (to the north, east, south and southwest). The CCCC serves as the only prominent visual feature in the area and is visible from the site as a group of white, low structures with flat roofs, surrounded by several rows of chainlink and razor wire-topped fencing, high-mast light poles, a perimeter road, and a cleared area/earthen berm surface water control features around the facility. The surrounding undeveloped areas are generally characterized by the moderately sloping terrain covered with bare soils and rocks and scattered brush vegetation. Informal trails created by OHV users weave throughout this area.

The off-site areas for the proposed utility infrastructure improvements consists of the public rights-of-way of local roads, which include paved roads with maintained dirt shoulders and unpaved roads. Asphalt pavement with dirt shoulders define Twenty Mule Team Parkway, Virginia Boulevard (south from Twenty Mule Team Parkway to the CCCC) and California City Boulevard between Randsburg-Mojave and Yerba Boulevard. The dirt roads and dirt shoulders are highly disturbed and support little to no vegetation. The site of the City's water reservoir and Phase 1 Booster Pump Station (BPS) features a beige, circular water tank and a brown and beige equipment building, surrounded by a chainlink fence. The site of the City's wastewater treatment plant (WWTP) includes a paved outdoor storage area, a beige and brown equipment building, a gray metal shed, white and beige equipment, and open ponds. This facility is surrounded by a chainlink fence.

Light and Glare

There are no existing sources of light or glare at the Project site. Security lighting at the adjacent CCCC is the only source of light in the area and is readily visible at the site. No streetlights or other lights at adjacent vacant lands are present near the site.

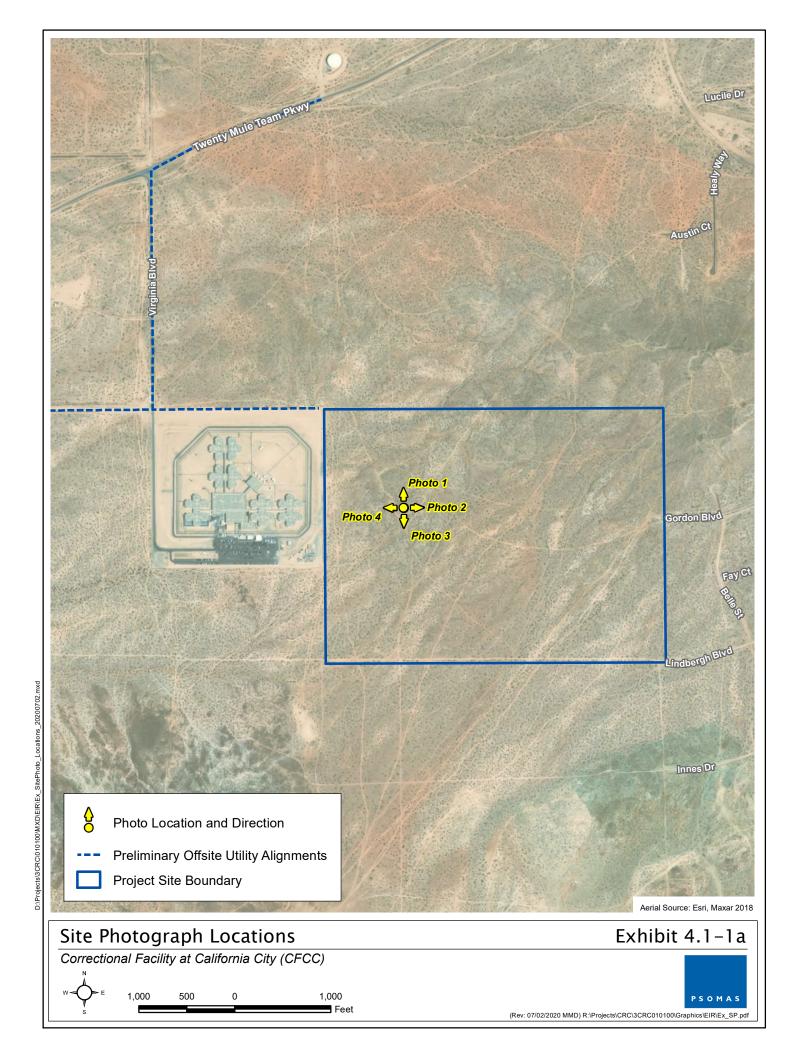




Photo 1. On-site photograph looking to the north.



Photo 2. On-site photograph looking to the east.

Site Photographs

Exhibit 4.1-1b

Correctional Facility at California City (CFCC)





Photo 3. On-site photograph looking to the south.



Photo 4. On-site photograph looking to the west at existing CAC.

Site Photographs

Exhibit 4.1-1c

Correctional Facility at California City (CFCC)



4.1.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to Aesthetics if it would:

Threshold 4.1a: Have a substantial adverse effect on a scenic vista.

Threshold 4.1b: Substantially damage scenic resources, including, but not limited to, trees,

rock outcroppings, and historic buildings within a State scenic highway.

Threshold 4.1c: In non-urbanized areas, substantially degrade the existing visual character

or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable

zoning and other regulations governing scenic quality?

Threshold 4.1d: Create a new source of substantial light or glare which would adversely

affect day or nighttime views in the area

4.1.4 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.1a: Would the project have a substantial adverse effect on a scenic vista?

Threshold 4.1b: Would the project substantially damage scenic resources, including,

but not limited to, trees, rock outcroppings, and historic buildings

within a State scenic highway?

Short-Term and Long-Term On-Site Construction and Operational Impacts

The Project site is undeveloped and contains no trees or buildings. Thus, no trees or historic buildings will be disturbed or removed. While scattered rocks are present throughout the site, they do not form a major rock outcropping that would be considered a scenic resource. Thus, their removal would not have a significant adverse impact on a scenic resource or scenic vista.

There is no officially designated State Scenic Highway near the site or that have views of the site. No designated National Scenic Byway or All-American Road is located in the area (FHWA 2018). In addition, no wild and scenic rivers are located near the site and the City (USFWS 2018). Twenty Mule Team Parkway is not a City-designated scenic corridor but offers views of the expansive desert floor, of which the site is a part.

Construction activities at the site will present views of construction equipment, building materials, and construction crews. These views would be temporary and would not occur on or near scenic vistas or scenic resources. Impacts would be less than significant.

Upon completion, the Project would introduce new buildings, paved areas, security fencing, a perimeter road, an entry monument/identification sign, downward-directed/shielded light masts and retention basins into the site. These improvements would change the visual quality of the site from undeveloped land to one that is more reflective of the adjacent CCCC. Thus, views of the site would change over existing conditions.

However, the site is located more than 3,000 feet from Twenty Mule Team Parkway and views from this roadway would still include large areas of vacant land along both sides of the road. Travelers on Twenty Mule Team Parkway would likely see the CCCC and the proposed CFCC

as a single larger development in the distance and only for the few seconds when they are passing near the site. Views of the desert floor and distant mountains to the south would continue to be visible. OHV users who ride around in the area would also see the Project, which would appear as a second correctional facility beside the CCCC. Views of the desert floor will continue to be available for this viewer group from various other vantage points in the surrounding area.

While inmates, visitors and employees of the CCCC will see the CFCC whenever they are looking east, these views would include the same fencing, perimeter road, and cleared setback areas that are currently present in the foreground views of the inmates and employees. No distant easterly views would be blocked by the Project. Also, views of adjacent undeveloped lands will continue to be available to the north, west and south of the CCCC.

The Project would not block scenic views or damage scenic resources along a scenic highway. Changes in traveler views from Twenty Mule Team parkway would be limited to a few seconds and OHV users are only near the site on a temporary basis. CCCC visitors are also in the area on a short-term basis. While permanent views of CCCC inmates and employees would change, the existing views of undeveloped lands will remain at other vantage points. Thus, impacts related to scenic vistas and scenic resources would be less than significant and no mitigation is required.

Short-Term Off-Site Construction Impacts

Construction activities will present views of construction equipment, building materials, and construction crews along the access road and utility alignments and at the public facility sites. These views would be temporary and would not occur on or near scenic vistas or scenic resources. The access road would be at-grade and the utility infrastructure for natural gas, water and wastewater pipelines would be placed underground. The water pump would be located within an existing equipment building at the Phase 1 BPS. The improvements to the WWTP would feature similar facilities (i.e., outdoor storage, equipment buildings and open ponds) to those that currently exist. Thus, they would not change the existing character of the WWTP operation or be highly visible in the long-term. No scenic vistas or scenic resources would be adversely impacted by off-site improvements. Impacts would be less than significant and no mitigation is required.

Threshold 4.1c:

Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

Short-Term On-Site Construction Impacts

Views of on-site construction would include activities and materials such as heavy equipment (e.g., backhoes, bulldozers, dump trucks), building construction activities and equipment, and stockpiles of building materials and equipment staging areas. There would be views of construction activities throughout the various stages of grading, paving, and building construction.

During construction, views of construction activities would be visible to inmates, visitors, and employees at the CCCC, travelers on Twenty Mule Team Parkway and other nearby roads, and OHV users in the surrounding areas. Views of construction activities may be considered unappealing but are only of a temporary nature. No significant adverse impacts on the existing visual character or quality of the site due to temporary construction activities would occur and no mitigation is required.

Long-Term On-Site Operational Impacts

Changes in the visual characteristics of the site would occur with the Project. As discussed in Section 3.0, Project Description, the Project would involve the construction of two 1,512-bed correctional centers that are each composed of smaller structures and common areas/gym areas. In addition, an administration building and other site improvements would occur. The Project would result in a low intensity development on the 216.5-acre site, as defined by a floor area ratio of less than 0.17. The rest of the site would be occupied by parking areas, drainage retention basins, outdoor recreational areas, walkways, service yards, perimeter roads and fences, slopes, and setback areas.

The Project's buildings would feature an institutional character with limited ornamentation due to the type of use. The facility would include several rows of security fencing with razor wire that would separate various sections of the site. In addition, observation towers, floodlights on highmast poles, a perimeter security road, cleared setback areas, parking areas, and limited landscaping would be provided on-site. While no architectural plans have been completed for the Project, the proposed buildings would be one-story and up to 45 feet tall. The light masts would be up to 100 feet high. It is anticipated that the buildings would be painted in neutral shades to blend with the desert landscape (e.g., shades of white and/or beige) and other site improvements such as asphalt pavement and retention ponds would be in shades of gray, black or brown.

Grading of the site and introduction of vertical structures above the desert floor would present a significant visual change from the natural character of the site. However, a limited number of viewers would be exposed to this change and there are no public vantage points in the area. As indicated above, public views of travelers would be passing near the site for a few seconds and would have limited views from Twenty Mule Team Parkway, which is located more than 3,000 feet from the site. OHV users are present in the surrounding area on a temporary basis and would also see the Project only when they are near the site. CCCC inmates, visitors, and employees would experience a change in the visual character of the site, but these would generally be similar to their current views of the CCCC. In addition, areas adjacent to the east of the Project site, were subdivided for residential use more than half century ago and are not anticipated to be constructed in the near future. Regardless, implementation of the proposed Project would affect views from future residents of this subdivided area. However, their future views currently consist of the existing CCCC to which the proposed Project would be visually similar. The proposed Project would not introduce a new viewshed to the area. In addition, the proposed Project would not create a new viewshed from Twenty Mule Team Parkway and for OHV users or for persons at or visiting the CCCC. Thus, impacts related to changes in the visual character or quality of the site would be less than significant and no mitigation is required.

Short-Term Off-Site Construction Impacts

Off-site access road, infrastructure improvements and public facility upgrades would include grading, excavation and construction activities that would be temporary and would not lead to a significant impact on visual quality. The access road would be at-grade and similar to nearby roads. Utility line extensions would be installed underground and would not affect the visual character of the surrounding area. The new pump at the Phase 1 BPS would be placed inside an existing building. Improvements at the WWTP would feature the same types of on-site facilities that currently exist. Thus, impacts related to changes in visual quality at off-site areas would be less than significant and no mitigation is required.

Threshold 4.1d: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Short-Term On-Site and Off-Site Construction Impacts

Construction activities for Phase 1 could begin in approximately 2024 and end in 2026 and construction for Phase 2 could begin in roughly 2027 and end in mid-2028. Construction would occur within working hours as allowed by City regulations (RR NOI-1), with no construction work on Sundays or federal holidays. As no construction would occur during the nighttime hours (from 8:00 PM to 6:00 AM between May 15 and September 15 and from 8:00 PM to 7:00 AM the rest of the year), there would be no high-intensity lighting at the site during the construction phases. Lighting would be limited to perimeter security lights focused inward and downward on the on-site equipment. Thus, construction activities would not be considered a source of substantial light and glare. Therefore, this impact would be less than significant and no mitigation is required.

Long-Term On-Site Operational Impacts

The Project would introduce new sources of light at the site, which would include security lights, building lights, and parking lot lights. The proposed buildings and site improvements would be constructed in compliance with applicable requirements from the California Building Code (CBC – Title 24 of the California Code of Regulations) and the National Fire Protection Code (NFPA). The primary objective of exterior lighting would be to illuminate entrances and to provide site lighting for security and wayfinding purposes. During operations, the Project would introduce new interior and exterior lighting into the approximate 216.5-acre site. The Project would have parking lot light poles; walkway and wayfinding lighting; gate and tower lights and spotlights; and security floodlights. These would increase nighttime lighting levels on the site and in the immediate vicinity.

Passing travelers and OHV users in the surrounding area would only see the increased lighting levels during the nighttime hours and on a temporary basis. Adjacent undeveloped lands to the north and south are not occupied on a permanent basis and thus, there would be no individuals who could be adversely affected by lights from the Project. However, future residential uses located to the subdivided area to the east would have visibility of proposed lighting. While the Project's new light sources would be the same types of light sources at the CCCC, there would be a perceived increase in lighting levels near the CCCC due to the introduction of lights to the 216.5-acre area immediately to the east. At the same time, the Project would provide setback areas between the CCCC and the proposed CFCC, including perimeter roads, retention basins, and parking areas that would diffuse on-site lighting. MM HAZ-2 in Section 4.9, Hazards and Hazardous Materials, of this EIR requires that proposed exterior lights shall be shielded and directed downwards to avoid impacts to aircraft operations in the area. This MM would also prevent any spillover light from affecting the adjacent CCCC or the future use of the subdivided area located to the east. The potential impacts of night lighting on wildlife is discussed in Section 4.4, Biological Resources, of this EIR and MM BIO-10 would reduce impacts on the behavioral patterns of nocturnal and crepuscular wildlife. As such, the introduction of new light sources at the site would have less than significant impacts and no mitigation is required.

In addition to light sources, glare can be caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and nuisances to other viewers. Exterior building materials for the Project are expected to include concrete, solid grouted concrete masonry units, metal roofs, steel frames and trims, and other traditional building materials used for institutional structures. No mirrored surfaces or

large areas covered with glazing materials are proposed by the Project that could create glare impacts on adjacent land uses.

Vehicles exiting the site after dark could generate light and glare impacts at the adjacent CCCC. However, the proposed east-west access road would be located to the north of the CCCC and would not direct vehicle lights into the CCCC buildings to the south. Vehicles on Virginia Boulevard and Twenty Mule Team Parkway would create the same glare impacts as existing vehicles on these roads. Impacts related to glare would be less than significant and no mitigation would be required.

Long-Term Off-Site Operational Impacts

The proposed access road would include streetlights that would introduce a new light source along the northern boundary of the CCCC. The access road would be approximately 150 feet from the outer fence of the CCCC and there are two rows of security lights along the perimeter fence and perimeter road. The proposed access road would be located at least 250 feet from the nearest CCCC structure. Thus, the proposed streetlights would not result in any substantial increase in lighting levels that may adversely affect the inmates at the CCCC.

The proposed utility infrastructure improvements would be underground and would not require lighting. The new pump at the Phase 1 BPS would be located inside an existing building and would not introduce light or glare into the area. The proposed improvements to the WWTP may include new security lighting; however, it would be constructed in compliance with applicable City regulations and not expected to cause glare at this public facility site. Thus, impacts related to new light and glare sources would be less than significant and no mitigation is required.

4.1.5 CUMULATIVE IMPACTS

The Project would lead to visual changes on the site. The cumulative projects and future growth development in the City and surrounding area would be considered relevant to the Project and would have to be located within the general viewshed of the Project. This would be limited to the 2,200-bed correctional center that is planned to the southwest of the Project site and south of the existing CCCC. No other specific development project is known to be planned in the surrounding areas.

As discussed above, Project implementation would alter the visual quality of the site and changes to the site would be visible to the individuals at the CCCC, travelers on nearby roads, and OHV users in the area. The future modified corrections center that would be developed adjacent to the west of the Project site would further alter the visual quality of the area, creating a group of correctional facilities. A larger area developed with buildings and associated site improvements would be visible to travelers, OHV users, and the inmates, visitors and employees of the CCCC, the proposed CFCC, and the future correctional center that is approved for property south of the CCCC. This larger developed area would continue to be surrounded mostly by wide expanses of vacant undeveloped lands. While areas to the east of the Project were subdivide more than 50 years ago, views in the area currently consist of the CCCC of which the proposed Project would be visually compatible. Thus, the changes in visual quality would present an incremental intensification of development but the short-term views of the site and surrounding areas and the similarity of the Project and adjacent future correctional center with the existing CCCC is expected to lessen the perception of change in views to an expansion of the existing institutional facility uses. The Project and adjacent future correctional center would not necessarily result in a substantial degradation of the visual character of the area. Also, the size of developments in relation to the size of the surrounding undeveloped lands would limit the cumulative visual

changes in the area. Cumulative impacts to the visual quality of the area would not be cumulatively considerable. Impacts would be less than significant.

Existing sources of light and glare in the surrounding area would increase with new light sources from the Project and the adjacent future correctional center. However, the CCCC has the same lighting sources and there are no other individuals in the surrounding area who would be exposed to increased lighting levels. Cumulative impacts related to light and glare would not be cumulatively considerable and would be less than significant.

4.1.6 MITIGATION MEASURES

No significant adverse impacts related to aesthetics have been identified; therefore, no mitigation is required.

4.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Direct, indirect or cumulative impacts related to scenic vistas, scenic resources, visual character, light and glare would be less than significant.

4.1.8 REFERENCES

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4.2 AGRICULTURE AND FOREST RESOURCES

4.2.1 RELEVANT PROGRAMS AND REGULATIONS

State

Farmland Mapping and Monitoring Program

The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP) pursuant to Section 65570 of the *California Government Code*. The FMMP identifies farmlands in the State based on current land use information and the U.S. Department of Agriculture, Natural Resources Conservation Service's (NRCS') soil survey data on soil characteristics that best support crop production. This program also tracks the conversion of farmland to other uses every two years.

In 2016, approximately 579,295 acres of Prime Farmland were mapped in Kern County, along with 209,484 acres of Farmland of Statewide Importance, 91,323 acres of Unique Farmland, 0 acres of Farmland of Local Importance, and 1,849,266 acres of Grazing Land. The total of 2,729,368 acres of Prime, Unique, and Agricultural Land in the County in 2016 reflects a 2,952-acre loss in agricultural land since 2014 (FMMP 2016a).

Land Conservation Act

The California Land Conservation Act of 1965, also known as the Williamson Act, is the State's primary program for the conservation of private land in agricultural and open space use. It is a voluntary program that offers preferential property taxes on lands which are in agricultural use and sets restrictions on their use and future conversion to non-agricultural land through contracts between the individual landowners and local governments.

There are no lands with Williamson Act contracts in the City. Rather, portions of the City's central core are designated as Urban and Built-Up Land and the rest of the City is designated as Non-Enrolled Land (DLRP 2013).

City

California City Municipal Code

Section 9-2.400 et seq. of the City's Municipal Code states that the Residential/Agricultural (RA) zoning district allows residential development at very low densities and permits the keeping of animals and fowl. Permitted uses include riding stables, corrals, shelters, animals in fenced areas, agricultural uses, nurseries and greenhouses, and temporary stands for the sale of agricultural products. The Open Space (O) district also allows agricultural uses, per Section 9-2.2302 pf the Municipal Code.

Under the overlay zones, residential districts are allowed to keep equines on lots one acre or more in size. Section 9-2.2407 establishes a Farm Animal Overlay Zone that allows the keeping of farm animals and Section 9-2.2408 establishes an Equestrian Overlay Zone, which allows the raising of horses on lots that are at least one acre in size and subject to the dedication of a sixty-foot wide vehicular, equestrian and utility easement.

4.2.2 EXISTING CONDITIONS

There are no existing agricultural uses on the site or adjacent areas. Also, off-site areas (e.g., road rights-of-way and public facilities) are not in agricultural use.

The FMMP does not designate any land in the City or the surrounding areas as Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, or Confined Animal Agriculture). Rather, the central core of the City is designated as Urban and Built-Up Land, Rural Residential Land, and Vacant or Disturbed Land, with two small areas of Semi-Agricultural and Rural Commercial Land. The northeastern section of the City where residential tracts have been built is also primarily designated as Vacant or Disturbed Land, with a small area of Semi-Agricultural and Rural Commercial Land. Areas surrounding the central core and northeastern area are designated as Nonagricultural and Natural Vegetation, as is the site, except for the CAC that is located immediately west of the site, which is designated as Urban and Built-up Land (FMMP 2017).

The site and the surrounding areas are designated as Non-Williamson Act Land - Non-Enrolled Land (DLRP 2013).

The site does not support trees that may be considered a forest or timberland. There are no designated forest lands or timberlands in or near the site or in the City. The nearest forest are the Sequoia National Forest, which is located over 30 miles northwest of the site, and the Angeles National Forest, which is over 40 miles to the southwest and south of the site (USFS 2018a, 2018b, 2018c).

4.2.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on Agriculture and Forest Resources if it would:

Threshold 4.2a: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide

Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources

Agency, to non-agricultural use.

Threshold 4.2b: Conflict with existing zoning for agricultural use, or a Williamson Act

contract.

Threshold 4.2c: Conflict with existing zoning for, or cause rezoning of, forest land (as

defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code

section 51104[q]).

Threshold 4.2d: Result in the loss of forest land or conversion of forest land to non-forest

use.

Threshold 4.2e: Involve other changes in the existing environment which, due to their

location or nature, could result in the conversion of Farmland to

non-agricultural use or conversion of forest land to non-forest use.

4.2.4 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.2a:

Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No lands in the City are designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance. The FMMP designates the site and surrounding areas as Nonagricultural and Natural Vegetation and the adjacent CAC as Urban and Built-Up Land (FMMP 2017). Therefore, the proposed Project and infrastructure improvements would have no impact on designated Farmlands. No mitigation is required.

Threshold 4.2b: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The City allows agricultural uses in the RA and O districts and the site is zoned RA and O. However, there are no agricultural uses on the site or in the adjacent areas. Governmental or quasi-governmental correction, probation or prison facilities and services are also conditionally allowed in the RA district. In addition, there are no Williamson Act contracts in or near the site or in the City. Therefore, the proposed Project and associated infrastructure improvements would have no impact on an agricultural zone or a Williamson Act contract. No mitigation is required.

Threshold 4.2c:

Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?

The City does not have a zoning district for forest land or timberland. Also, no forests exist in or near the site or in the City. The proposed Project and associated infrastructure improvements would have no impact on forest lands. No conflict with zoning for forest land or timberland would occur, and no mitigation is required.

Threshold 4.2d: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No forest land is located in or near the site and no conversion of forest land to other uses would occur with the proposed Project. Also, proposed infrastructure improvements would not affect forest lands that are located several miles outside the City. No impacts related to the loss of forest land or the conversion of forest land to a non-forest use would occur with the Project and associated infrastructure improvements. No mitigation is required.

Threshold 4.2e:

Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No ongoing agricultural or forest operations occur on or near the site. Therefore, the Project and associated infrastructure improvements would have no impact on agricultural use or forest lands, nor would it lead to the conversion of agricultural land or forest land to other uses. No impacts on agriculture and forest resources related to land conversion are expected, and no mitigation is required.

4.2.5 CUMULATIVE IMPACTS

The City of California City and the surrounding areas do not support agricultural uses. While there are agricultural lands in Kern County, these lands are not located anywhere near the site or the surrounding area. Therefore, the Project and associated infrastructure improvements and future growth and development in the City, as well as future development in nearby unincorporated County lands, would not lead to a cumulative or considerable conversion of farmland to urban uses. Implementation of the proposed Project and future development in the surrounding area would also not lead to the conversion of forest land or timberland to other uses. No cumulative adverse impacts on farmlands, forest lands, timberland, agricultural operations, nor crop production would occur; nor would there be any conflict with agricultural zones or Williamson Act contracts.

4.2.6 MITIGATION MEASURES

No significant adverse impacts on agriculture and forest resources have been identified; therefore, no mitigation is required.

4.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No direct, indirect or cumulative impacts on agriculture and forest resources would occur with the Project.

4.2.8 REFERENCES

- California City, City of. 2009 (October 6). City of California City Final General Plan. California City, CA: City of.
- California Department of Conservation, Division of Land Resource Protection (DLRP). 2013. <u>Kern County Williamson Act FY 2013/2014 Sheet 3 of 3</u>. Sacramento, CA: DLRP.
- California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). 2017a (August). Rural Land Mapping Edition, Kern County Important Farmland 2016 Sheet Sacramento, 3. CA: FMMP. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/ker16 e.pdf 2017b (September). 2016 Field Report – County: Kern. Sacramento, CA: FMMP. —. 2016a. Kern County 2004–2016 Land Use Summary (an Excel spreadsheet). Sacramento, CA: FMMP. Municode Corporation (Municode). 2017 (August 30). Municipal Code, City of California City, California. Tallahassee, FL: Municode. https://library.municode.com/ca/california city/codes/code of ordinances?nodeld=1542 United States Department of Agriculture, Forest Service (USFS). 2018a (January 3, access date). US Forest Service Recreational Activities - Find National Forests and Grasslands. Washington, DC: USFS. https://www.fs.fed.us/recreation/map/xca_nv_south.html. -. 2018b (January 3, access date). National Forest Locator Map. Washington, D.C.: USFS. https://www.fs.fed.us/locatormap/.

-. 2018c (January 3, access date). Sequoia National Forest, Vicinity Map. Washington, DC: USFS. http://www.fs.usda.gov/detailfull/sequoia/home/?cid=stelprdb5404463&width=full

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4.3 AIR QUALITY

This section addresses potential short-term (construction-related) and long-term (operational) air quality impacts that would result from implementing the proposed Project. The air quality impact analysis includes a discussion of existing air quality, including monitored criteria pollutants and attainment designations and potential air quality impacts that would occur with construction and operation of the Project. The Project's estimated construction and operations phase air pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod, Version 2016.3.2). The inputs and data for the Project are included in Appendix B of this DEIR.

4.3.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Clean Air Act and National Ambient Air Quality Standards

The U.S. Environmental Protection Agency's (USEPA'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. As part of its enforcement responsibilities, the USEPA requires each State with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain and maintain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution by using a combination of performance standards and market-based programs within the SIP-identified timeframe. The USEPA is also responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants, which are discussed further below under Section 4.3.3, Existing Conditions. Table 4.3-1, California and National Ambient Air Quality Standards, provides additional information.

<u>State</u>

California Ambient Air Quality Standards

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research; sets the California Ambient Air Quality Standards (CAAQS), as shown in Table 4.3-1; compiles emission inventories; develops suggested control measures; oversees local programs; and prepares the SIP. For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for (1) motor vehicles sold in California; (2) consumer products (e.g., hair spray, aerosol paints, and barbecue lighter fluid); and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

TABLE 4.3-1 CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

		California	Federal Standards			
Pollutant	Averaging Time	Standards	Primary ^a	Secondary ^b		
	1 Hour	0.09 ppm (180 μg/m ³)	_	-		
Оз	8 Hour	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)	Same as Primary		
PM10	24 Hour	50 μg/m³	150 μg/m³	Same as Primary		
FIVITO	AAM	20 μg/m³	_	Same as Primary		
PM2.5	24 Hour	-	35 μg/m³	Same as Primary		
FIVIZ.5	AAM	12 μg/m³	12.0 μg/m³	15.0 μg/m³		
	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m³)	-		
со	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m³)	-		
00	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)	-	-		
NO ₂	AAM	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m³)	Same as Primary		
INO ₂	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 μg/m³)	-		
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^c	-		
SO ₂	3 Hour	_	-	0.5 ppm (1,300 μg/m³)		
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 μg/m³) –			
	AAM		0.030 ppm (for certain areas) ^c			
	30-day Avg.	1.5 μg/m ³	_	-		
Lead	Calendar Quarter	-	1.5 μg/m ³	Same as Primary		
	Rolling 3-month Avg.	_	0.15 μg/m³	Same as i lillary		
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No			
Sulfates	24 Hour	25 μg/m³	Federal Standards			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Standards			
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)				

 O_3 : ozone; ppm: parts per million; μ g/m³: micrograms per cubic meter; PM $\overline{10}$: respirable particulate matter; AAM: Annual Arithmetic Mean; –: No Standard; PM2.5: fine particulate matter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO $_2$: nitrogen dioxide; SO $_2$: sulfur dioxide; km: kilometer.

 $Note: More \ detailed \ information \ in \ the \ data \ presented \ in \ this \ table \ can \ be \ found \ at \ the \ CARB \ website \ (www.arb.ca.gov).$

Source: CARB 2016

^a National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

California Code of Regulations, Title 13, Section 2485 (13 CCR §2485) places restrictions on vehicular idling. It requires that on or after January 1, 2015, any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must prohibit vehicle idling for more than 5 consecutive minutes at any location. Additionally, diesel-fueled internal combustion engine auxiliary power systems (APS) must be prohibited from operating for greater than 5 minutes at any location when within 100 feet of any property zoned for individual or multifamily housing units, schools, hotels, motels, hospitals, senior care facilities or childcare facilities. As an alternative to idling the primary engine, diesel-fueled engines/vehicles may, as an option, be equipped with alternative technologies.

California Occupational Safety and Health Respiratory Protection Standard

California Occupational Safety and Health (Cal/OSHA) regulations contained in Title 8 of the CCR outline the State regulations related to Valley Fever. Section 342 in Title 8 of the CCR requires every employer to report immediately to the nearest District Office of the California Division of Occupational Safety and Health (DOSH) any serious injury or illness, or death, of an employee occurring in a place of employment or in connection with any employment. Section 3203 requires every employer to develop and implement an injury and illness prevention program that includes safe and healthy work practices, hazards at the worksite, training and retraining programs, periodic inspections for identifying and evaluating workplace hazards, and other issues related to occupational safety and health. Section 5121 requires engineering controls or the use of respiratory protective equipment to prevent harmful exposures. Section 5144 states that employers shall be responsible for the establishment and maintenance of a respiratory protection program related to use of respirators and that includes procedures to control occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. Lastly, Section 14300 requires employers to record work-related fatalities, injuries, and illnesses.

Regional

Ozone Attainment Plan

In 2008, the USEPA adopted more stringent 8-hour ozone NAAQS and in 2012, a portion of the Eastern Kern Air Pollution Control District (EKPACD) area was classified as Marginal Nonattainment. The USEPA designated the Mojave Desert Air Basin that is part of the EKAPCD area as a Moderate Nonattainment area for 8-hour Ozone NAAQS in 2016 pursuant to the provisions of the CAA. The conducted photochemical modelling and supplemental analyses by EKAPCD and CARB indicate that the EKAPCD area could not meet the attainment deadline for Moderate Nonattainment area but could meet the deadline for Serious Nonattainment areas. Thus, EKAPCD requested reclassification of its area to Serious Nonattainment, with an attainment date of December 2020.

The EKAPCD's Ozone Attainment Plan addresses the emission reductions and control measures that are needed and that it is implementing to meet federal 8-hour Ozone standard by 2020. It includes a Serious Nonattainment reclassification request; an emissions inventory; and emissions forecasting. Additionally included is an attainment demonstration and contingency measures in the event of failure to achieve Reasonable Further Progress (RFP) milestones and to attain 8-hour zone NAAQS by the attainment deadline (EKAPCD 2017).

Reasonable Available Control Technology State Implementation Plan

The EKAPCD's Reasonable Available Control Technology (RACT) SIP for the 2008 Ozone National Ambient Air Quality Standards addresses the EKAPCD's compliance with the CAA requirements to adopt and implement RACT for all source categories for which the USEPA has published Control Techniques Guidelines (CTG) and for all major sources of non-CTG. The EKAPCD has adopted and revised it rules to meet RACT, which cover CTG and non-CTG sources. In August 2017, the CARB approved the EKAPCD's RACT SIP as a revision to the California SIP.

Eastern Kern Air Pollution Control District Regulations

To implement its Ozone Attainment Plan and RACT SIP, the EKAPCD has adopted rules and regulations to attain and maintain the NAAQS and CAAQS within the District boundaries. EKAPCD rules (EKAPCD 2020) generally prohibit or limit the discharge of air contaminants into the air and regulate stationary sources through permits that limit emissions of oxides of nitrogen or reactive organic gases and hazardous pollutants. In addition, the EKAPCD has adopted requirements for permitting and reporting and prohibitions for visible emissions (Rule 401), fugitive dust (Rule 402), particulate matter emissions (Rules 404.1 and 405), incineration (Rule 408), fuel-burning equipment (Rule 409), architectural coatings (Rule 410.1A), storage of organic liquids (Rule 411), nuisance (Rule 419), new stationary sources (Rule 422), hazardous air pollutants (Rule 423), and other air pollutant sources. The EKAPCD also charges fees for issuing permits, inspections, and emissions testing of equipment that may cause the emission of air contaminants. In addition, it has published suggested air pollution mitigation measures for construction sites, which include dust control measures for land preparation, excavation and/or demolition, building construction, and vehicular control measures for dust and tailpipe emissions.

City

California City Building Code

The City of California City Building Code (City Building Code) is promulgated under Title 8 of the City Municipal Code. The City Building Code incorporates (and adopts by reference) the most current edition of the California Building Code (CBC). Section 8-1.01 of Title 8 (Chapter 1) states that, "The most current edition, nor or in the future published, of the Code designated as the "Uniform Building Code," adopted by the California Building Standards Commission. The 2022 Building Energy Efficiency Standards will improve upon the currently adopted 2019 Energy Code for residential and nonresidential buildings. These proposed standards will be adopted in 2021 and have an effective date of January 1, 2023.

4.3.2 EXISTING CONDITIONS

The Project site is located in the western end of the Mojave Desert Air Basin (MDAB), which includes the eastern portion of Kern County, the northeastern portion of Los Angeles County, the High Desert (northern and central) portions of San Bernardino County, and the Palo Verde Valley (eastern portion) of Riverside County. The portion of the MDAB in the eastern section of Kern County, where the site is located, is under the jurisdiction of the EKAPCD.

Climate and Meteorology

The Mojave Desert has an arid climate with cool winters, hot summers and little rainfall. Maximum daily temperatures exceed 100 degrees Fahrenheit (°F) in summer and the annual average

rainfall is less than 8 inches. Temperatures increase and rainfall decreases generally from south to north and from west to east, with predominant winds from the south and west (CARB 2011).

The maximum annual average temperature measured at the Cantil Station, which is the closest station and located northwest of the site was 89 °F, from 1971 through 2000. The highest monthly maximum temperature (105°F) occurs in August and the lowest monthly minimum temperature (29°F) occurs in December and January. The average annual total precipitation during the same period was 4.13 inches (WRCC 2018b). The average snowfall was 0.4 inch from 1955 to 1974 (WRCC 2018a). The prevailing wind direction is southwest, with an annual average wind speed at the Edwards Air Force Base (south of the site) of 10.8 miles per hour (WRCC 2018c, 2018d).

Criteria Air Pollutants

Concentrations of the following air pollutants are used as indicators of ambient air quality conditions: nitrogen dioxide (NO_2); ozone (O_3); particulate matter, including both respirable particulate matter equal to or less than 10 microns in diameter (PM10) and fine particulate matter equal to or less than 2.5 microns in diameter (PM2.5); carbon monoxide (PM10); sulfur dioxide (PM10); and lead. These air pollutants are commonly referred to as "criteria air pollutants" because they are the principal air pollutants identified by the USEPA as being harmful to human health. A description of each criteria air pollutant, including source types and health effects, is provided below.

Nitrogen Dioxide

Nitrogen Dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban environments. NO_2 , nitric oxide (NO), and nitrous oxide (N_2O) are constituents of oxides of nitrogen (NOx). Motor vehicle emissions are the main source of NO_x in urban areas. NO_2 is toxic to various animals and to humans because of its ability to combine with water in the eyes, lungs, mucus membranes, and skin to form nitric acid. Laboratory studies show that susceptible humans (such as asthmatics) who are exposed to high concentrations of NO_2 can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations among NO_2 concentrations and (1) mortality from respiratory and cardiovascular causes and (2) hospital admissions for respiratory conditions.

Ozone

Ozone (O_3) is a secondary pollutant (i.e., it is not directly emitted) and is a gas that is formed when volatile organic compounds (VOCs) (also referred to as reactive organic gases or ROGs) and NO_x undergo a photochemical reaction that occurs in the presence of sunlight. Thus, VOC and NO_x are O_3 precursors. The primary sources of VOC emissions are gasoline-fueled motor vehicles and solvent evaporation from consumer products. Sunlight and hot weather cause ground-level O_3 to form. Thus, low wind speeds or stagnant air combined with warm temperatures and clear skies provide the optimum conditions for O_3 formation. As a result, O_3 is known as a summertime air pollutant.² Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind, and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants. People with lung disease, children, older adults, and persons who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure.

About ¹/₇ of the diameter of a single human hair.

Ground-level O_3 is not to be confused with atmospheric O_3 or the "ozone layer", which occurs very high in the atmosphere and shields the planet from some ultraviolet rays.

Particulate Matter

Particulate matter (PM) includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are respirable PM particles smaller than or equal to 10 microns in diameter (PM10) and fine PM particles smaller than or equal to 2.5 microns in diameter (PM2.5). Small particles are of greater concern because they can penetrate deeper into the lungs than larger particles.

PM10 is generally emitted directly by mechanical processes that crush or grind larger particles (most typically through construction activities and vehicular travel); these emissions are known as fugitive dust.³ Fugitive dust is also generated during moderate to high wind episodes. The principal sources of dust in urban areas include grading, construction, disturbed areas of soil, and dust entrained by vehicles on roadways. PM10 generally settles out of the atmosphere rapidly and is not readily transported over large distances.

PM2.5 is also generated by PM10 sources and is directly emitted in combustion exhaust from diesel engines in trucks, construction equipment, and trains. Unlike PM10, PM2.5 can remain suspended in the atmosphere for days and/or weeks and can be transported long distances by wind. The principal health effect of airborne particulate matter (i.e., PM10 and PM2.5) is on the respiratory system. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses and premature death, and people with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience a decline in lung function due to inhaling PM10 and PM2.5. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

Carbon Monoxide

Carbon monoxide (CO) is a colorless and odorless gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches; can aggravate cardiovascular disease; and can impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections; along heavily used roadways carrying slow-moving traffic; and at or near ground level.

Sulfur Dioxide

The primary source of sulfur dioxide (SO_2) emissions is fossil fuel combustion for generating electric power and combustion of motor fuels. However, stricter standards have removed most of the sulfur from fuels, greatly reducing sulfur oxide (SOx) emissions from vehicles. SO_2 combines easily with water vapor, forming aerosols of sulfurous acid, a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid (H_2SO_4) . SO_2 can cause temporary breathing difficulty for children, the elderly, and persons with asthma, especially asthmatics who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

In an air pollution discussion, "fugitive" describes sources that are not confined to specific emission points such as power plant stacks or vehicle exhaust pipes.

Lead

Lead is a metal found naturally in the environment and in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. Lead is a stable compound that persists and accumulates both in the environment and in animals. In humans, it affects the body's blood-forming, nervous, and renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological and gastrointestinal systems, although there is significant individual variability in response to lead exposure.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths and serious illness or that may pose an existing or potential hazard to human health. TACs include both organic and inorganic chemical substances emitted from a variety of common sources, including motor vehicles, industrial operations, gasoline stations, dry cleaners, painting operations, and research and teaching facilities. TACs are different than the "criteria" pollutants in that ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. Diesel engine emissions (known as diesel particulate matter or diesel PM) are responsible for the majority of California's known cancer risk from outdoor air pollutants. In addition, diesel soot causes visibility reduction and is a potent global warmer.

Air Quality Data for Criteria Air Pollutants

The portion of the MDAB in the eastern section of Kern County, where the site is located, is under the jurisdiction of the EKAPCD. Air quality at any site is generally dependent upon regional air quality and local pollutant sources. Regional air quality is determined by the amount and type of pollutants released throughout the air basin. Air quality data representative of the Project area is collected at the Mojave Monitoring Station, which is the closest monitoring station to the Project site. The Mojave Station is located on 923 Poole Street, in the City of Mojave, approximately 18 miles southeast of the Project site. Pollutants measured at the Mojave Station include O₃, PM10, and PM2.5. The monitoring data presented in Table 4.3-2, Air Quality Levels Measured at the Mojave Monitoring Station, were obtained from CARB (CARB 2020). Federal and State air quality standards are also presented in the table.

TABLE 4.3-2 AIR QUALITY LEVELS MEASURED AT THE MOJAVE MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level ^a	Days State Standard Exceeded ^b	Days National Standard Exceeded ^{b, c}
			2016	0.104	2	N/A
O₃ (1 hour)	0.09 ppm	None	2017	0.097	1	N/A
(Triodi)			2018	0.111	8	N/A
			2016	0.093	60	52
O ₃ (8 hour)	0.070 ppm	0.070 ppm	2017	0.086	37	35
(O flour)			2018	0.095	56	53
	50 μg/m³	150 μg/m³	2016	130.3	18/18.9	0/0
PM10 (24 hour)			2017	85.7	10/	0/
(24 Hour)			2018	86.5	19/	0/0
D1440	20 μg/m³	None	2016	_	_	-
PM10 (AAM)			2017	_	_	_
(/ 0 ((V))			2018	_	_	_
5140.5			2016	25.7	N/A	0/0
PM2.5 (24 Hour)	None	35 µg/m³	2017	26.9	N/A	0/0
(Z+11001)			2018	39.0	N/A	2/2.1
		15 μg/m³	2016	_	_	_
PM2.5 (AAM)	12 µg/m³		2017	_	_	_
(AAIVI)			2018	_	_	-

^{-:} Data Not Reported or insufficient data available to determine the value. N/A indicates that there is no applicable standard.

Source: CARB 2020.

The Mojave Monitoring Station data shows that O_3 is the air pollutant of primary concern in the Project area, where the State 1-hour and 8-hour O_3 standards and the federal 8-hour standard were exceeded in 2016–2018. O_3 is a secondary pollutant and is not directly emitted from a source; it occurs as the result of chemical reactions between other pollutants, most importantly VOCs and NO_2 , which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Because NO_2 is a primary constituent of O_3 , the high O_3 levels in the area are expected to primarily result from the transport of NO_2 and O_3 that is formed outside California City and the Project area.

Particulate matter (PM10 and PM2.5) is another air pollutant of concern in the area. The State and federal 24-hour PM10 standards and the federal PM2.5 standard were exceeded in 2016 through 2018. Particulate levels in the area are due to natural sources (such as wind erosion), grading operations, and motor vehicles.

Regional air quality is defined by whether the area has attained or not attained State and federal standards, as determined by monitoring. Areas that are in nonattainment are required to prepare plans and implement measures that will bring the region into attainment. When an area has been

a California maximum levels were used.

^b For annual averaging times, a "Yes" or "No" response is given if the annual average concentration exceeded the applicable standard.

PM is measured once every 6 days. Where two values are shown for PM10 and PM2.5, the first is for the measured value and the second is the estimated value if monitored every day.

reclassified from nonattainment to attainment for a federal standard, the status is identified as "maintenance", and there must be a plan and measures established that will keep the region in attainment for the following ten years. Table 4.3-3 below lists the current attainment designations for the eastern Kern County portion of the MDAB.

TABLE 4.3-3 EASTERN KERN AIR POLLUTION CONTROL DISTRICT ATTAINMENT STATUS

	Attainment Status							
		Fe	deral					
Pollutant State		EKAPCD Area	Kern River/Cummings Valleys ¹					
O ₃ (1 hour)	Nonattainment	Attainment ²	Part of EKAPCD Area					
O ₃ (8 hour) ³	Nonattainment	Serious Nonattainment	Part of EKAPCD Area					
PM10	Nonattainment	Unclassifiable/Attainment	Serious Nonattainment					
PM2.5	Unclassified	Unclassifiable/Attainment	Part of EKAPCD Area					
СО	Unclassified	Unclassifiable/Attainment	Part of EKAPCD Area					
NO ₂	Attainment	Unclassified	Part of EKAPCD Area					
SO ₂	Attainment	Unclassified	Part of EKAPCD Area					
Lead	Attainment	Unclassifiable/Attainment	Part of EKAPCD Area					
Particulate Sulfate	Attainment							
Hydrogen Sulfide	Unclassified	No federal standard						
Visibility Reducing Particles	Unclassified	- INO ICUGIAI Stallualu						

O₃: ozone; PM10: respirable particulate matter with a diameter of 10 microns or less in diameter; PM2.5: fine particulate matter with a diameter of 2.5 microns or less in diameter; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide.

Notes

- 1 Kern River Valley, Bear Valley, and Cummings Valley were previously included in the federally designated San Joaquin Valley PM10 Serious Nonattainment Area but were made a separate nonattainment area in 2008. This area is included in EKAPCD for all NAAQS other than PM10.
- The 1-hour ozone NAAQS was revoked effective June 15, 2004. The EKAPCD was in attainment for 1-hour ozone NAAQS at time of revocation; the proposed Attainment Maintenance designation's effective date was June 21, 2004, therefore it did not become effective.
- Attainment for 1997 8-hour Ozone NAAQS (0.08 ppm), Nonattainment/Marginal for 2008 NAAQS (0.075ppm), and Nonattainment for the State 8-hour standard (0.070ppm)

Source: EKAPCD 2018, CARB 2018.

The USEPA designates an area as "Unclassifiable" if, based on available information, it cannot be classified as either meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. For CARB, an "Unclassifiable" designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment. As noted in Table 4.3-3, some of the criteria pollutants have been designated as Unclassified: PM10, PM2.5, NO₂, SO₂, Lead, Particulate Sulfate, Hydrogen Sulfide, and visibility reducing particles.

Table 4.3-3 also shows that the USEPA has designated the EKAPCD portion of MDAB as being in Serious Nonattainment for ambient O_3 concentrations. To be designated as an Attainment area by the State, the EKAPCD area will need to achieve CAAQS for both the 1-hour and 8-hour O_3 standards.

Valley Fever

Valley Fever; formally known as *Coccidioidomycosis*, is the common name for a fungal disease caused by inhalation of *Coccidioides immitis* spores that grow in undisturbed soil. Winds, dust storms, earthquakes, and activities that disturb the top few inches of soil allow spores to travel for miles and infect humans and animals. It is found in parts of the southwestern United States, Mexico, and South and Central America, where soil and climactic conditions are conducive to the presence of the Valley Fever fungus.

Over 75 percent of the cases have occurred in people who live in the Central Valley (San Joaquin Valley). Most people (approximately 60 percent) exposed to Valley Fever spores develop no symptoms and their body take cares of the fungus on its own. Other individuals generally develop a flu-like illness one to three weeks after exposure; and symptoms last about a month. A small proportion of infected individuals develop more severe symptoms that spread outside the lungs to the bone, brain, joints, skin and other organs; this is known as "disseminated Valley Fever" and can be very serious and fatal (CDPH 2019a).

At highest risk for exposure to Valley Fever are people engage in activities that actively disturb soils in areas where Valley Fever may be present (e.g., construction, farming, or military work). Persons at the highest risk of developing disseminated Valley Fever include adults over 60 years; immunocompromised individuals; people with diabetes; pregnant women; and certain ethnic groups, including African-Americans and Filipinos (CDPH 2017).

In California, an increase in Valley Fever cases occurred in 2017 (5,121 cases), compared to 2016 (3,827 cases) (CDPH 2018). Cal/OSHA has established regulations to reduce the incidence of Valley Fever. Statewide in 2018, Kern County had the highest incidence of about 323.2 cases per 100,000, or 2,937 case-patients (CDPH 2019b). The Kern County Public Health Services Department (KCPHSD) has developed general prevention measures, occupational prevention measures, and recreational prevention measures to prevent Valley Fever exposure as part of its public education program (KCPHSD 2020). However, no specific regulations or requirements are imposed by KCPHSD (KCPHSD 2018).

Sensitive Receptors

Certain groups of people, such as the elderly, children, and persons with respiratory illnesses or impaired lung function because of other illnesses, are more sensitive to airborne pollutants. Sensitive receptors are land uses that provide facilities and/or structures where these sensitive persons live or spend considerable amounts of time. These land uses include, but are not limited to schools, school yards, day care facilities, hospitals, rest homes, long-term medical facilities, and parks/playgrounds. Residences are also considered sensitive receptors because of their potential to house children and the elderly. The inmates of the adjacent CCCC are considered the nearest off-site sensitive receptors to the proposed CFCC facility. In addition, there may be future residential uses located to the east of the proposed CFCC facility. Other sensitive receptors include residential uses located proximate to the proposed offsite utility lines and the Wastewater Treatment Plant (WWTP) improvements.

4.3.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to Air Quality if it would:

Threshold 4.3a Conflict with or obstruct implementation of the applicable air quality plan.

- **Threshold 4.3b** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- **Threshold 4.3c** Expose sensitive receptors to substantial pollutant concentrations.
- **Threshold 4.3d** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The EKAPCD has adopted the Kern County Air Pollution Control District's (KCAPCD's) Guidelines for Implementation of the CEQA of 1970, As Amended (KCAPCD CEQA Guidelines) (KCAPCD 1999). The KCAPCD CEQA Guidelines state that a proposed project is determined to not have a significant air quality impact if operation of the project will:

- 1. Emit (from all project sources subject to KCAPCD Rule 201) less than offsets trigger levels set forth in Subsection III.B.3. of KCAPCD's Rule 210.1 (New and Modified Source Review Rule); The offset trigger levels are:
 - PM10 15 tons per year
 SOx (SO2) 27 tons per year
 VOC 25 tons per year
 NOx (NO2) 25 tons per year
- 2. Emit less than 137 pounds per day of NOx or Reactive Organic Compounds from motor vehicle trips (indirect sources only);
- 3. Not cause or contribute to an exceedance of any California or National Ambient Air Quality Standard; (Threshold 4.3c)
- 4. Not exceed the District health risk public notification thresholds adopted by the KCAPCD Board; and
- 5. Be consistent with adopted federal and state Air Quality Attainment Plans. (Threshold 4.3a)

Furthermore, the Guidelines refer to KCAPCD Rule 208.2 – Criteria for Finding of No Significant Environmental Impact (CEQA). Section III of Rule 208.2 states that the issuance of the initial or renewal Permit to Operate for a new or modified emissions unit shall be found to have no potential for causing a significant effect on the environment if the source will meet all conditions imposed by any and all Authority to Construct permits associated with such emissions unit and all applicable laws, rules, and regulations enforced by the District.

4.3.4 REGULATORY REQUIREMENTS

RR AIR-1 Construction activities will incorporate the dust control and vehicular control measures developed by the EKAPCD, which include, but is not limited to the following:

Dust control measures to be implement during land preparation, excavation and/or demolition:

1. All soil excavated or graded should be sufficiently watered to prevent excessive dust. Watering should occur as needed with complete coverage of disturbed

soil areas. Watering should be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.

- 2. All clearing, grading, earthmoving and excavation activities should cease
 - a. during periods of winds greater than 20 mph (averaged over one hour), if disturbed material is easily windblown, or
 - b. when dust plumes of 20% or greater opacity impact public roads, occupied structures or neighboring property.
- 3. All fine material transported offsite should be either sufficiently watered or securely covered to prevent excessive dust.
- 4. If more than 5,000 cubic yards of fill material will be imported or exported from the site, then all haul trucks should be required to exit the site via an access point where a gravel pad or grizzly has been installed.
- 5. Areas disturbed by clearing, earthmoving or excavation activities should be minimized at all times.
- 6. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
- 7. Where acceptable to the fire department, weed control should be accomplished by mowing instead of discing, thereby, leaving the ground undisturbed and with a mulch covering.

Dust control practices for building construction, after clearing, grading, earth moving and/or excavation activities:

- 8. Once initial leveling has ceased all inactive soil areas within the construction site should either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission.
- 9. All active disturbed soil areas should be sufficiently watered to prevent excessive dust, but no less than twice per day.

Vehicular control measures to be implemented during all phases of construction:

DUST

- 10. Onsite vehicle speed should be limited to 15 mph.
- 11. All areas with vehicle traffic should be paved, treated with dust palliatives, or watered a minimum of twice daily.
- 12. Streets adjacent to the project site should be kept clean and accumulated silt removed.
- 13. Access to the site should be by means of an apron into the project from adjoining surfaced roadways. The apron should be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of the vehicles, a grizzly or other such device should be used on the road exiting the project,

immediately prior to the pavement, in order to remove most of the soil material from the vehicle's tires.

TAILPIPE EMISSIONS

- 14. Properly maintain and tune all internal combustion engine powered equipment.
- 15. Require employees and subcontractors to comply with California's idling restrictions for compression ignition engines.
- 16. Use low sulfur (CARB) diesel fuel.
- RR AIR-2 All equipment, appliances and mechanical and electrical systems shall comply with EKAPCD rules and regulations, which include, but are not limited to:
 - Rule 106, Land Use, on EKAPCD's duty to review and advise planning authorities on all new construction nor changes in land use that could become a source of air pollution problems.
 - Rule 108.2, Emissions Statement Requirements, for persons owning or operating any source operation with the potential to emit oxides of nitrogen or reactive organic gases.
 - Rule 201, Permits, requiring an Authority to Construct and a Permit to Operate any new or modified equipment which may cause the issuance of air contaminants or eliminate, reduce or control air contaminants.
 - Rule 401, Visible Emissions, which prohibits discharges into the atmosphere that is as dark or darker than an established shade or obscures an observer's view like smoke.
 - Rule 402, Fugitive Dust, which requires the prevention, reduction or mitigation of anthropogenic fugitive dust emissions in an amount sufficient to attain and maintain NAAQS and CAAQS.
 - Rules 404.1 and 405, Particulate Matter Concentration, which requires particulate matter emissions to not exceed 0.1-grains per standard cubic foot of gas at standard conditions (gr/scf) and the allowable emissions based on process weight rate.
 - Rule 408, Disposal of Solids and Liquids, which sets requirements for incineration activities for the disposal of solids and liquids.
 - Rule 409, Fuel-Burning Equipment Combustion Contaminants, which regulates furnaces, boilers, apparatus, stack and appurtenances used in the process of burning fuel for producing heat or power by indirect heat transfer.
 - Rule 410.1A, Architectural Coatings, which limits the VOC emission from architectural coatings.
 - Rule 411, Storage of Organic Liquids, for equipment used to store organic liquids and petroleum distillates (e.g., kerosene, diesel, gas oil, stove oil, jet fuels, fuel oil, and asphalts) with a true vapor pressure of greater than 1.5 pounds per square inch above local atmospheric pressure.
 - Rule 419, Nuisance, prohibiting the discharge from any source of air contaminants or other material which cause injury, detriment, nuisance, or

- annoyance to any considerable number of persons or to the public, except for odors from agricultural operations.
- Rule 422, New Stationary Sources, which sets standards, criteria and requirements for new stationary sources, as contained in Part 60, Chapter 1, Title 40 of the Code of Federal Regulations.
- Rule 423, Hazardous Air Pollutants, which sets standards, criteria and requirements for hazardous air pollutants, as contained in Parts 61 and 63, Chapter 1, Title 40 of the Code of Federal Regulations.
- RR AIR-3 All construction activities will be conducted in compliance with Section 2485 of Title 113 of the California Code of Regulations, which requires that all diesel-fueled commercial motor vehicles must not idle for more than 5 consecutive minutes at any location.
- RR AIR-4 The construction contractors and CFCC operators shall comply with applicable California Occupational Safety and Health regulations. These include, but are not limited to, regulations that would prevent the incidence of Valley Fever. Specifically, contractors and operators shall develop and implement an injury and illness prevention program that includes safe and healthy work practices, hazards at the worksite, training and retraining programs, periodic inspections for identifying and evaluation of unsafe conditions and workplace hazards, investigations and corrections of unsafe conditions, and other issues related to occupational safety and health. Engineering controls and/or the voluntary or required use of respiratory protective equipment to prevent harmful exposures to air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, including Valley Fever spores, shall be included in a respiratory protection program to the extent feasible. Contractors and operators shall record work-related fatalities, injuries and illnesses and shall report immediately to the California Division of Occupational Safety and Health any serious injury or illness, or death, of an employee.

4.3.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.3a Would the project conflict with or obstruct implementation of the applicable air quality plan?

Short-Term and Long-Term On-site and Off-site Impacts

The EKAPCD Ozone Attainment Plan calls for compliance with EKAPCD rules and regulations for attainment ozone standards in the EKAPCD area by 2020. Use of construction and operational equipment and other on-site systems and activities would be subject to the permit requirements of the EKAPCD. Mitigated construction related emissions associated with the Project were also found to be below the EKAPCD's significance thresholds and would comply with the air pollutant minimization measures identified under RR AIR-1 through RR AIR-4. Issuance of Permits to Operate for on-site and off-site emission sources, including compliance with the conditions of the permits, would be considered to further the implementation of the Ozone Attainment Plan. The operations phase of the Project would likewise generate emissions that are less than the EKAPCD's significance thresholds and would likewise result in less than significant air quality impacts. The proposed Project buildings would also comply with the latest energy efficiency standards identified under the CalGreen and State of California Title 24 standards. As such, the Project would not conflict with or obstruct implementation of the EKAPCD's attainment plans and would not result in significant impacts relative to consistency with EKACPD attainment plans.

Threshold 4.3b Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non attainment under an applicable federal or state ambient air quality standard.

The Project construction and operations phases will generate air pollutant emissions and would contribute cumulatively to ambient air quality conditions within the air basin. The EKAPCD has adopted daily and annual significance thresholds to determine whether Project-related emissions would be considerable.

Construction and operational emissions were calculated by using CalEEMod Version 2016.3.2. CalEEMod is a computer program that is used to calculate anticipated emissions associated with land development projects in California. CalEEMod uses pollutant emission rates from the CARB's Emission FACtor model for on-road vehicles; CARB's OFFROAD 2011 for construction and material handling equipment; and USEPA formulas for non-vehicular emissions. Where appropriate, emission factors, trip distance, and other data in the model are specific to a county or air basin. The Kern County – Mojave Desert data were used for the proposed Project. The model calculates emissions of the following criteria pollutants: VOC, NOx, CO, SO₂, PM10, and PM2.5.

Specific inputs to CalEEMod for both construction and operations include land uses and acreages associated with the Project. Construction input data include but are not limited to the start and finish dates of construction phases; inventories of construction equipment to be used during each phase; volumes of structures to be demolished; areas to be paved; and areas to be painted. Output emissions data are provided for off-road equipment, on-road vehicles, fugitive dust from grading, and VOCs from asphalt and architectural coatings.

Operational inputs include the year of analysis and vehicle trip generation rates. Output operational emissions data categories include area, energy, and mobile sources. Area sources are landscape maintenance equipment, consumer products, and architectural coatings used for routine maintenance. Energy emissions are from natural gas consumption. Mobile sources are the vehicles used by staff, visitors, and vendors, and include buses used for inmate transport. The mobile source emissions were derived from trip generation forecasts for the Project as described in Section 4.16, Transportation and Traffic, and Appendix I of this EIR.

The CalEEMod model also includes data to calculate emissions reductions resulting from the implementation of regulatory requirements (RRs). As discussed previously, the EKAPCD has adopted daily and annual significance thresholds to assess the impact of Project-related air pollutant emissions.

Short-Term On-site and Off-site Construction Impacts

Construction of the Project could begin in January 2024 and be completed by the 2nd quarter of 2028, totaling approximately 24 months for Phase 1 and starting again in early 2027 until 2nd quarter of 2028 for Phase 2. For Phase 1 activities, site preparation would take 6 months and grading activities would take approximately 9 months. These would include the movement of approximately 1,900,000 cubic yards (cy) of cut and fill material, not including any overexcavation that may be required for re-engineering and recompaction of fill material. Grading would be balanced on site; no import or export of soils would occur. Physical building construction is planned to require approximately 21 months. Paving of parking areas and internal roads and painting of buildings would occur during roughly the final 7 months of construction. Phase 2 activities would include approximately 3 months of underground utility construction and 18 months of building construction.

All construction activities must be conducted in compliance with all applicable EKAPCD rules and regulations. RR AIR-1 provides a listing of the required dust control and vehicle control measures (RR AIR-1). In addition, RR AIR-2 summarizes the various EKAPCD Rules that may be applicable to the Project, including regulations for visible emissions, fugitive dust, and particulate matter emissions. Dust-control measures that would control fugitive dust and avoid nuisance are included in the CalEEMod inputs in Appendix B. Construction would also be required to comply with the Rule 419, Nuisance, which prohibits the emission of quantities of air contaminants that could cause injury, detriment, nuisance, or annoyance to the public, or that endanger the comfort, repose, health or safety of the public.

The principal source of the VOC emissions during construction would be architectural coatings, which would be applied during the last seven months of Project construction. RR AIR-1 requires that paints comply with the EKAPCD's Rule 410.1A to reduce VOC emissions. Compliance with Rule 410.1A is assumed in the emissions calculations. The principal source of NOx emissions would be the diesel engines from construction equipment during grading and building activities, and the principal source of PM10 and PM2.5 emissions would be fugitive dust during earth-moving activities.

Table 4.3-4 includes the results of the calculations for the estimated peak daily construction emissions during each year of construction activity. As shown, there would be exceedances of the NO_x emissions thresholds for criteria pollutants adopted by the EKAPCD when measured by the maximum daily construction emissions. Impacts would be significant prior to the implementation of mitigation measures.

TABLE 4.3-4
ESTIMATED ANNUAL PEAK DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	VOC	NOx	СО	SOx	PM10	PM2.5
2024	21	213	154	0	57	32
2025	17	154	162	0	10	7
2026	52	47	54	0	5	3
2027	4	30	36	0	3	2
2028	60	39	50	0	4	2
Maximum	60	213	162	0	57	32
EKAPCD Daily Thresholds	137	137		148	82	82
Exceeds EKAPCD Thresholds?	No	Yes	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; EKACPD: Eastern Kern Air Pollution Control District.

Sources: KCAPCD 1996 (thresholds). Emissions calculations can be found in Appendix B.

With the application of mitigation measures (MM AIR-1 and MM AIR-2), mitigated Project-related emissions would be less than significant as shown in Table 4.3-5. No significant air quality impacts would occur, and impacts would be less than significant.

TABLE 4.3-5 ESTIMATED MITIGATED ANNUAL PEAK DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	voc	NOx	СО	SOx	PM10	PM2.5
2024	7	78	196	<1	23	13
2025	11	129	194	<1	10	7
2026	52	37	64	<1	5	2
2027	2	23	43	<1	3	2
2028	58	32	57	<1	4	2
Maximum	58	129	196	<1	23	13
EKAPCD Daily Thresholds	137	137		148	82	82
Exceeds EKAPCD Thresholds?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; EKACPD: Eastern Kern Air Pollution Control District.

Sources: KCAPCD 1996 (thresholds). Emissions calculations can be found in Appendix B.

The EKAPCD also has established significance thresholds for construction emissions occurring on an annual basis. Table 4.3-6 includes the results of the calculations for the estimated construction emissions during each year of construction activity. As shown, there would be no exceedance of thresholds for criteria pollutants adopted by the EKAPCD when measured annually. Impacts would be less than significant and no mitigation is required.

TABLE 4.3-6
ESTIMATED ANNUAL TOTAL CONSTRUCTION EMISSIONS (TONS)

Year	VOC	NOx	СО	SOx	PM10	PM2.5
2024	1	6	5	<1	2	1
2025	2	13	15	<1	1	1
2026	1	1	2	<1	<1	<1
2027	<1	4	5	<1	<1	<1
2028	1	2	2	<1	<1	<1
Maximum	2	13	15	<1	2	1
EKAPCD Daily Thresholds	1	6	5	<1	2	1
Exceeds EKAPCD Thresholds?	2	13	15	<1	1	1

VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; EKACPD: Eastern Kern Air Pollution Control District.

-- Not provided

Sources: KCAPCD 1996 (thresholds). Emissions calculations can be found in Appendix B.

The emissions modeling assumes a 5-day work week. If some or all construction would occur on a 6-day per week schedule and/or the schedule would be shortened by using more equipment, annual emissions may increase for the years affected. Because the total construction effort would not change, there would be offsetting decreases of air emissions later in the Project construction schedule. Annual Project-related emissions were found to be below the EKAPCD's significance thresholds and the impact would be less than significant and no mitigation would be required.

Long-Term On-site and Off-site Operational Impacts

Regional Emissions

Emissions were calculated using the CalEEMod Version 2013.2.2 model, described above. The complete results of the CalEEMod modeling calculations are presented in Appendix B of this EIR. Regional emissions were calculated based primarily on anticipated building energy and water consumption, wastewater treatment needs, and vehicular trips accessing the site. Vehicle trips were provided the Project Traffic Impact Study (Appendix I of this EIR) and trip lengths were calculated based on trip origin/destination data (CCA 2006) specific to correctional facilities and the California City area. The projected annual operational emissions (which include area, energy, and mobile sources) are shown in Table 4.3-7 below. The primary source of NO_x, CO, PM10, and PM2.5 emissions generated by the Project would be from motor vehicles. The primary source of VOC emissions would be consumer products (an area source) used by staff and inmates, including cleaning supplies and personal products.

TABLE 4.3-7
ESTIMATED ANNUAL OPERATIONAL EMISSIONS (TONS)

Emission Source	voc	NOx	СО	SOx	PM10	PM2.5
Area Source Emissions ^a	6	<1	<1	<1	<1	<1
Energy Emissions ^a	<1	2	2	<1	<1	<1
Vehicle Emissions ^a	1	7	18	<1	9	2
Waste Emissions ^a					<1	<1
Water Emissions ^a					<1	<1
Total Project Emissions	7	9	20	<1	9	3
EKAPCD Annual Thresholds	25	25		27	15	15
Exceeds EKAPCD Thresholds?	No	No	No	No	No	No

VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; EKACPD: Eastern Kern Air Pollution Control District.

Sources: KCAPCD 1996 (thresholds). Emissions calculations can be found in Appendix B.

As shown in Table 4.3-7, the estimated annual operational emissions due to Project-related operations would not exceed the EKAPCD significance thresholds.

The EKAPCD has indicated that the Project may need permits to operate equipment at the site, such as emergency diesel backup generators. An Authority to Construct may also be needed for the WWTP improvements, along with Permits to Operate any new equipment that would be installed. The additional pump at the City's Phase 1 booster pumping station (BPS) may also require a Permit to Operate from the EKAPCD. In compliance with EKAPCD rules and regulations, as outlined in RR AIR-2, the Project shall obtain the necessary Authority to Construct and Permits to Operate from the EKAPCD. Compliance with the conditions of the permits would be required as part of RR AIR-2 and would further reduce long-term operational emissions. There would be a less than significant impact and no mitigation is required.

^a Totals may not add up due to rounding.

⁻⁻ Not provided by EKAPCD

Threshold 4.3c Would the project expose sensitive receptors to substantial pollutant concentrations?

Short-Term On-site and Off-site Construction Impacts

Construction activities attributable to the Project would result in less than significant constructionrelated regional air quality impacts on an annual basis, as quantified above in Table 4.3-6 but would exceed the EKAPCD's daily significance thresholds for construction activities prior to the implementation measures as shown in Table 4.3-4. With the incorporation of mitigation measures. the proposed Project would result in less than significant daily construction emissions. Construction emissions would be distributed and would disperse over the large extent of the Project site (216 acres). Dust generation from soil disturbance activities and vehicle exhaust emissions would be also be minimized under the numerous emissions control requirements detailed under RR AIR-1, RR AIR-2 and RR AIR-3. The Project site is also not currently located proximate to other land use development. The nearest developed use is the existing CCCC facility which is located approximately 250 feet from the closest Project site boundary. Generally, construction activities would occur much further from the CCCC with the center of the Project site located approximately 2,000 feet away. There are no developed sensitive uses (schools, residences, hospitals...) within a mile of the Project site. This distance would allow for vehicle exhaust and fugitive dust to disperse and not result in excessive exposure to nearby sensitive receptors. There is the potential for future residential uses to be built to the east of the proposed Project. If these future residential uses are occupied during the construction phase of the proposed Project, these residents would be exposed to project related fugitive dust and vehicle exhaust. However, due to the large area for which the construction activities would occur, air pollution generated by the Project would be diminished with distance from soil disturbance activities and the residential uses. In addition, the Project's construction activities are required to comply with RR AIR-1, RR AIR-2 and RR AIR-3 and MM AIR-1. Compliance with these measures will substantially suppress dust generation and minimize vehicle exhaust.

For the offsite utility connections and major extensions as well as the WWTP upgrades, there would be construction locations that would occur proximate to residential uses. Construction vehicle exhaust and dust generation would occur from the development of these project components and would result in air pollutant emissions. The number of equipment associated with these activities are not considered to be substantial and would not result in high levels of air pollutant emissions at each of these project sites. These activities are likewise required to comply with RR AIR-1, RR AIR-2 and RR AIR-3 and MM AIR-1. Compliance with these measures would substantially suppress dust generation and minimize vehicle exhaust.

With the implementation of the regulatory requirements and mitigation measures, less than significant air quality impacts would occur related to the potential exposure of sensitive receptors to substantial air pollutant concentrations.

Long-Term On-site and Off-site Operational Impacts

The Project site is located adjacent to undeveloped land and the CCCC, and is not located in an area that has major sources of toxic or hazardous emissions, as generally associated with major freeways and high-traffic roads, distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, and gasoline dispensing facilities. Also, the existing CCCC does not emit toxic air contaminants or hazardous emissions in significant quantities. Thus, the Project would not be exposed to hazardous emissions.

The Project's use of various large equipment (such as commercial kitchen facilities and the emergency generator) may generate air contaminants from fuel combustion. However, per

RR AIR-2, the Project would have to comply with applicable EKACPD rules, including Rule 201 (requiring a Permit to Construct prior to the installation of any equipment that may cause air contaminants), as well as Rules 108.2, 408, 409, 410.1A and 411 for specific requirements for the use of any equipment that may generate air contaminants. Impacts from stationary equipment would be less than significant, with compliance with RR AIR-2.

Carbon Monoxide Hotspots

On-site operational mobile and area sources would be dispersed throughout the Project area and would make a minimal contribution to local ambient pollutant concentrations. For localized CO impacts from mobile sources at congested intersections, an appropriate screening procedure is provided in the procedures and guidelines contained in *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) to determine whether a project poses the potential for a CO hotspot (UCD ITS 1997). The key criterion is whether the Project would worsen traffic congestion at intersections operating at level of service (LOS) E or F.

An initial screening for the potential for the Project to create a CO hotspot was conducted in accordance with the CO Protocol. The Project traffic analysis, as described in Section 4.15, Transportation and Traffic, of this EIR, indicates that, under Existing with Project and Future with Project conditions, all study area intersections would operate at LOS B or better. Therefore, the Project would not create a CO hotspot. The impact would be less than significant and no mitigation would be required.

Valley Fever

As shown on Exhibit 3-1, Preliminary Site Plan, outdoor pervious areas (e.g. permeable surfaces such as landscaped areas or open ground with bare soils) would include approximately 15 percent of the Project site, while the remaining 85 percent of the site would be impervious (e.g., paved or buildings). Outdoor recreational areas and other non-paved areas on the Project site that would be covered with landscaping, decomposed granite, turf grass, gravel, or wood chip ground cover would minimize the opportunity for soils to become airborne. Thus, there would be limited few opportunities for on-site soils to produce airborne dust.

The Project site is located adjacent to undeveloped lands to the northeast, south and southwest that have exposed native soils that could contain Valley Fever spores that may also become airborne during windstorms. Therefore, the future employees, inmate population, visitors and other individuals at the Project may be subject to exposures to dust containing Valley Fever spores. CFCC operators would have to comply with Cal/OSHA regulations (Cal/OSHA 2020) related to the development and implementation of an Injury and Illness Prevention Program and a Respiratory Protection Program that would reduce hazards associated with exposure to Valley Fever spores (RR AIR-4). The Injury and Illness Prevention Program may include the following measures:

- Use appropriate soil stabilizers, soil binders, and/or vegetation to reduce airborne dust on exposed soils.
- Minimize activities that involve soil disturbance.
- Avoid ground disturbance work during heavy winds.
- Identify a health care provider for occupational injuries and illnesses who is knowledgeable about the diagnosis and treatment of Valley Fever

- Train employees about the risk of Valley Fever, the work activities that may increase the
 risk, and the measures used onsite to reduce exposure. Also train on how to recognize
 Valley Fever symptoms.
- Encourage employees and inmates to report Valley Fever symptoms promptly to a supervisor.

Should the CFCC be operated as a State prison, California Department of Corrections and Rehabilitation (CDCR) policies shall apply. In response to concerns over potential exposure of prisoners to Valley Fever at State prisons and facilities in areas where Valley Fever is common, the CDCR instituted a new medical policy that prohibits housing prisoners with certain medical conditions in the Avenal State Prison (ASP) and Pleasant Valley State Prison (PVSP) because those conditions increase the risk of getting very sick or dying if the person catches Valley Fever (PLO 2015). ASP is located in Kings County and PVSP is located in Fresno County, more than 135 miles northwest of the Project site.

The operation of the Project will follow standard procedures for medical care and prevention with regards to health care services for inmates in general, including Valley Fever cases. The KCPHSD is the designated County agency with the mandate to protect health, prevent disease, and promote the health and well-being of all persons within Kern County. Any future changes in KCPHSD policies regarding Valley Fever will be implemented, as applicable, at the Project. With compliance with RR AIR-4, there would be a less than significant Valley Fever impact at the Project site during long-term operations, and no mitigation is required.

Threshold 4.3d Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Short-Term On-site and Off-site Construction Impacts

Construction of the Project would involve the use of equipment and activities that would generate odors. Potential construction odors include construction equipment's diesel exhaust and roofing, painting, and paving operations. There may be times where construction activity odors would be noticed by the existing population in the immediate vicinity of the construction areas (e.g., people at CCCC near the Project site, future residential uses east of the Project site and persons present along the utility infrastructure and public facility improvement sites). These odors would be temporary and would dissipate rapidly from the source (i.e., construction equipment) with an increase in distance. These activities may be noticeable but do not constitute a public nuisance. Therefore, the presence of potential construction-related odors would be short-term and would not affect a substantial number of people. As such, there would be a less than significant impact. No mitigation would be required.

Toxic Air Contaminants

The greatest potential for toxic air contaminant emissions during construction would be related to diesel PM emissions associated with heavy equipment operations during earth-moving activities. The assessment of cancer risk is typically based on a 70-year exposure period for residents and a 40-year exposure period for workers. Construction activities associated with the Project would be sporadic, transitory, and short term in nature (i.e., two years for Phase 1 and 1.5 years for Phase 2). Because exposure to diesel exhaust would be well below the 70-year and 40-year exposure periods, construction of the Project is not anticipated to result in an elevated cancer risk to exposed persons due to the short-term nature of construction. Additionally, pursuant to Section 2485 of Title 13 of the CCR (RR AIR-3), all diesel-fueled commercial motor vehicles must not be

left idling for more than 5 consecutive minutes at any location. As such, Project-related TAC emission impacts during construction would not be significant and no mitigation is required.

Valley Fever

Valley Fever has been a concern in the Central Valley for many years. Although not a criteria air pollutant, Valley Fever fungal spore infections develop through inhalation of airborne fungal spores contained in windblown dust, and is recognized to be endemic in areas with dry, alkaline soil conditions. Valley Fever fungal spores may be released through natural wind or ground-disturbing activities on undeveloped land. Thus, the greatest potential risk for Valley Fever exposure is during Project construction, particularly to workers on site, where construction-related activities may cause Valley Fever spores to be released from dormancy. The Project's construction would involve mass grading, earth moving, construction, and other ground disturbance that can cause fugitive dust emissions. As such, construction workers at the site are at risk of contracting Valley Fever, due to construction-related activities that disturb the soils on site.

Construction activities for the Project would include the implementation of dust control measures as required by the EKACPD (RR AIR-1). EKAPCD Rules 401, 402, 404.1 and 405 also limit visible emissions, fugitive dust, and particulate matter emissions, as stated in RR AIR-2. In addition, compliance with Cal/OSHA regulations would require construction contractors and CFCC operators to implement an Injury and Illness Prevention Program and a Respiratory Protection Program that would reduce hazards associated with exposure to Valley Fever spores (RR AIR-4). The Injury and Illness Prevention Program may include the following measures:

- Minimize the area of soil disturbed.
- Use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust
- Stabilize all spoils piles by tarping or other methods.
- Provide air-conditioned cabs for vehicles that generate heavy dust and make sure workers keep windows and vents closed.
- Suspend work during heavy winds.
- Onsite sleeping quarters, if provided, should be placed away from sources of dust.
- Provide respiratory protection with particulate filters
- Clean tools, equipment, and vehicles before transporting offsite.
- If workers' clothing is likely to be heavily contaminated with dust, provide coveralls and change rooms, and showers where possible.
- Identify a health care provider for occupational injuries and illnesses who is knowledgeable about the diagnosis and treatment of Valley Fever
- Train workers and supervisors about the risk of Valley Fever, the work activities that may
 increase the risk, and the measures used onsite to reduce exposure. Also train on how to
 recognize Valley Fever symptoms.
- Encourage workers to report Valley Fever symptoms promptly to a supervisor to avoid a delay in appropriate diagnosis and treatment.

Compliance with RR AIR-1, RR AIR-2 and RR AIR-4 would ensure that potential impacts associated with on-site construction workers' exposure to Valley Fever would be less than significant and no mitigation is required.

Long-Term On-site and Off-site Operational Impacts

Land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of these uses, nor would it include other activities that would produce objectionable odors. However, the Project would have kitchens and odors characteristic to some foods and some cooking processes would be emitted. The kitchen odors would readily dissipate and would be the same odors generated by the adjacent CCC. The Project would also include an on-site wastewater grinder and potentially a holding tank prior to the conveyance of wastewater into sewer lines. These would be relatively small, contained facilities that would be subject to regular maintenance and would not generate substantial objectionable odors. Thus, odor impacts on the inmates, visitors, and employees of the CCCC and the proposed Project would be less than significant.

The proposed infrastructure improvements (e.g., access road and utility lines) would not generate odors during long-term use. The additional pump at the Phase 1 BPS would not generate odors and would be located on a site surrounded by vacant land on all sides. The proposed improvements at the WWTP would generate the same odors as the existing WWTP operations. The increase in wastewater volume that would be generated by the Project (estimated at 0.28 mgd) and treated at the WWTP would not generate substantial odors over the existing wastewater volume that is treated at the WWTP (approximately 0.60 mgd of the plant's 1 mgd capacity). As part of the EKAPCD's Permit to Operate, the WWTP is required to comply with EKAPCD Rule 419. The Operational Conditions identified in the Permit states "There shall be no odors detectable at or beyond the property boundary. (Rule 419). Continued compliance with the requirements of the Permit will result in less than significant impacts related to odors. Also, the WWTP is surrounded by mostly vacant lands that would allow odors to readily dissipate. Therefore, the Project would not generate objectionable odors that would affect a substantial number of people. Impacts would be less than significant and no mitigation is required.

4.3.6 CUMULATIVE IMPACTS

This section provides an analysis of cumulative impacts from construction and operation of the Project, the proposed modified community corrections center or detention center near the site, as well as future growth and development in the area. The cumulative projects and future growth and development in the City used for this analysis are discussed in Section 2.4, Cumulative Developments, of this EIR. The analysis of cumulative air quality impacts also considers future development in the entire Mojave Desert Air Basin, over which cumulative impacts related to air quality could occur.

Construction-Related Cumulative Impacts

As discussed under Thresholds 4.3f and 4.3g above, the Project would result in less than significant temporary construction-related regional air quality impacts for all criteria pollutants. As discussed under Threshold 4.3b above, construction emissions from the adjacent proposed modified community corrections center or detention center would be reduced by compliance with applicable EKAPCD rules (RR AIR-1 through RR AIR-3). Other development projects in the EKAPCD area would also have to comply with the same EKAPCD rules and regulations. Therefore, because of the limited amount of Project-related emissions relative to significance thresholds and with compliance with EKAPCD rules, it is concluded that regional construction emissions would not be cumulatively considerable. Mitigated construction emissions attributable to the Project would not result in significant unavoidable direct or cumulative impacts related to air quality, including cumulative impacts related to PM10 and O3 for which the EKAPCD area is in nonattainment.

As discussed above under Threshold 4.3c and 4.3d, there would be less than significant impacts related to exposure of sensitive receptors to diesel PM (i.e., TACs) and odors. Short-term cumulative impacts for criteria pollutants, diesel PM, and odors could occur if construction associated with the Project and surrounding current and future developments were to occur simultaneously. Similar to the discussion for the PM10 analysis of Threshold 4.3d, consideration of cumulative construction-related impacts for diesel PM and odors would be limited to construction of the adjacent modified community corrections center or detention center that would be located southwest of the site. Development of the extensions of utility lines and WWTP improvements would not involve large quantities of equipment such that cumulative emissions with other projects would result in substantial cumulative emissions. This impact would be less than significant. Other growth and developments in the Mojave Desert Air Basin are expected to occur in or near California City's central core and other urban centers of on scattered lots. Due to distance between these development sites and the Project site, cumulative diesel PM and odor impacts would be less than significant.

Operation-Related Cumulative Impacts

As discussed under Thresholds 4.3a through 4.3d above, the Project would result in less than significant long-term operational air quality impacts for all criteria pollutants. Other related projects would be evaluated on a project level and mitigation measures would be incorporated as needed to minimize excessive air pollutants. As discussed previously, the Project would result in less than significant regional and local air quality impacts. Therefore, the Project would not result in a cumulatively significant contribution to air pollutant emissions and would have a less than significant cumulative air quality impact related to long-term regional emissions of all criteria pollutants.

The analysis for local CO hotspot impacts under Thresholds 4.3c and 4.3g is based on a traffic analysis that includes cumulative development in the area; see Section 4.15, Transportation and Traffic, of this EIR. Therefore, the screening analysis that demonstrated a less than significant impact is inherently a cumulative analysis, and the cumulative impact would be less than significant.

Regarding TACs, Valley Fever exposure, and odors, as discussed under Thresholds 4.3c, 4.3g, and 4.3d, the construction of the adjacent modified community corrections center or detention center has not been set but there is a possibility that it could be constructed at the same time as the Project, and thus, could potentially contribute to a cumulative impact for construction-related TACs, Valley Fever exposure, and odor emissions. However, the use of construction equipment and construction activities would have to comply with EKAPCD rules (RR AIR-2). Also, the implementation of dust control measures, as required by EKACPD under RR AIR-1, would reduce exposure to Valley Fever spores. In addition, the Project and the future adjacent corrections center or detention center would not be major sources of TACs, Valley Fever exposure, or objectionable odors. Therefore, the Project would result in less than significant cumulative impacts related to TACs, Valley Fever exposure, and odors. No mitigation is required.

4.3.7 MITIGATION MEASURES

As discussed in Threshold 4.3b, significant impacts related to daily construction emissions for VOCs from the application of architectural coatings and NOx from construction vehicle exhaust would occur. The following mitigation measures are required to minimize air pollutant emissions.

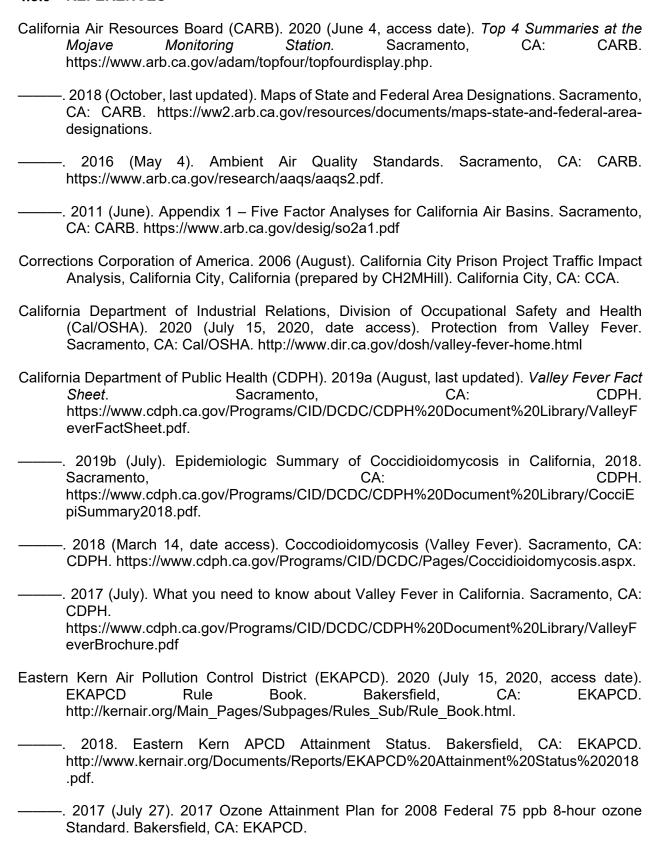
MM AIR-1 All offroad construction vehicles will comply with USEPA Tier 4 final engine standards which were enacted in 2015.

MM AIR-2 The application of architectural coatings will comply with the 10 grams/liter VOC limit as specified under super compliant coatings. This does not apply to the limited use of specialty coatings.

4.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the application of mitigation measures (MM AIR-1 and MM AIR-2), mitigated Project-related emissions would be less than significant. No significant air quality impacts would occur, and impacts would be less than significant.

4.3.9 REFERENCES



Kern County Air Pollution Control District (KCAPCD). 1999 (July 1, amended). Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, As Amended. Bakersfield. CA: KCAPCD. http://www.kernair.org/Documents/CEQA/CEQA Guidelines%20&%20Charts.pdf. Kern County Public Health Services Department (KCPHSD). 2020 (June 4, last accessed). Prevention. Bakersfield, CA: KCPHSD. http://kerncountyvalleyfever.com/what-is-valleyfever/prevention/. -. 2018 (March 15). Telephone conversation between Jyoti Kaur, MPH, Senior Public Health Epidemiologist at KCPHSD and J. Alido at Psomas. Prison Law Office (PLO). 2015. (January). Valley Fever and CDCR Housing. San Quentin, CA. http://prisonlaw.com/wp-content/uploads/2015/09/ValleyFeverJan2015.pdf University of California Davis (UCD), Institute of Traffic Studies (ITS) 1997 (December, as revised). Transportation Project-Level Carbon Monoxide Protocol (Prepared for Environmental Program California Department of Transportation by V.J. Garza, P. Graney, and D. Sperling with revisions by D. Niemeier, D. Eisinger, T. Kear, D. Chang, and Y. Meng). Davis, CA: UCD ITS. http://www.dot.ca.gov/env/air/docs/co-protocol-searchable.pdf. Western Regional Climate Center (WRCC). 2018a (March 14, access date). Period of Record Monthly Climate Summary, Cantil, California (041488). Reno, NV: WRCC. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca1488. -. 2018b (March 14, access date). Cantil, California, 1971-2000 Temperature and Precipitation. Reno, NV: WRCC. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca1488 -. 2018c (March 14, access date). Average Wind Speeds by State. Reno, NV: WRCC. https://wrcc.dri.edu/htmlfiles/westwind.final.html#CALIFORNIA.

-. 2018d (March 14, access date). Prevailing Wind Direction by State. Reno, NV: WRCC.

https://wrcc.dri.edu/htmlfiles/westwinddir.html#CALIFORNIA

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4.4 BIOLOGICAL RESOURCES

This section evaluates the potential biological resources impacts associated with the construction and operation of the proposed Project. The analysis is based on the following reports:

- Appendix C-1: Biological Resources Technical Report (Garcia and Associates [GANDA], dated October 2016)
- Appendix C-2: Special Status Plant Surveys (Psomas, dated August 2017, July 2020)
- Appendix C-3: Jurisdictional Delineation (Psomas, dated December 2020)
- Appendix C-4: Burrowing Owl Survey (Psomas, dated August 2017)
- Appendix C-5: Biological Technical Report (Psomas, dated December 2020)

4.4.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects plants and animals that the government has listed as "Endangered" or "Threatened". The FESA is implemented by enforcing Sections 7 and 9 of the Act. A federally listed species is protected from unauthorized "take" pursuant to Section 9 of the FESA. "Take", as defined by the FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct. In this definition, "harm" includes "any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife". Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species".

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and "which may require special management considerations or protection". Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with the USFWS and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified" by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources."

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner, unless permitted by regulations, to "pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer

to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . . ".

On December 22, 2017, the Department of the Interior Office of the Solicitor released Memorandum M-37050 stating that the MBTA's "taking" or "killing of migratory birds applies only to deliberate acts such as hunting intended to take a migratory bird. This administration will not seek criminal penalties against companies and individuals who incidentally take migratory birds through otherwise lawful activities. This reverses the previous administration's interpretation, which issued Memorandum M-37041 stating that the MBTA applied to both intentional and incidental take. However, because of the court's split interpretation on the MBTA, it is recommended that companies continue to implement Best Management Practices (BMPs) to mitigate impacts on migratory birds.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments establishes the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

Section 401 and 404 of the Clean Water Act of 1972

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the 404 permit program and for making jurisdictional determinations. This permitting authority applies to all waters of the United States where the material has the effect of (1) replacing any portion of waters of the United States with dry land or (2) changing the bottom elevation of any portion of waters of the United States. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in waters of the United States. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established federal or State water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), is responsible for administering the Section 401 water quality certification program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The SWRCB's and RWQCBs' jurisdiction also extend

to all "waters of the State" when no waters of the United States are present, including wetlands and non-wetland waters of the State (isolated and non-isolated). The USEPA is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who essentially has been delegated the responsibility of administering the water quality certification (Section 401) program.

The Navigable Waters Protection Rule was published in the Federal Register on April 21, 2020 and will become effective on June 22, 2020. The Navigable Waters Protection Rule provides new regulatory text defining waters of the United States. One of the major changes to the definition of waters of the United States is that ephemeral waters are no longer subject to USACE regulation under the CWA. While the USACE and USEPA have reduced areas under their jurisdiction, the SWRCB will assert jurisdiction over all waters that meet any historic definitions of waters of the United States.

On May 28, 2020, the SWRCB's recently issued *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State* went into effect. Under these new regulations, the SWRCB and its nine RWQCBs will assert jurisdiction over all existing waters of the United States and all waters that would have been considered waters of the United States under the definition that existed prior to the 2020 Navigable Waters Protection Rule (i.e., ephemeral waters). Thus, the waters of the United States that would no longer be under USACE jurisdiction following the Navigable Waters Protection Rule would still be under the SWRCB's jurisdiction as waters of the State.

State

California Endangered Species Act

The State of California implements the CESA which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the California Code of Regulations.

State-listed Threatened and Endangered species are protected under provisions of the CESA. Activities that may result in take of individuals (defined in CESA as acts to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. While habitat degradation or modification is not included in the definition of take under CESA, the CDFW has interpreted take to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If it is determined that the take would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the *California Code of Regulations*. If a Statelisted species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW's requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code*.

California Fish and Game Code

Native Plant Protection

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The act requires all State

agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

<u>Unlawful Take or Destruction of Nests or Eggs</u>

These sections duplicate federal protection under the MBTA. Section 3503 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy any bird's nest or any bird's eggs. Further, any birds in the orders *Falconiformes* or *Strigiformes* (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the *California Fish and Game Code*. Section 3513 of the *California Fish and Game Code* prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

California Fully Protected Species

The State of California created the "Fully Protected" classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or Federal Endangered Species Acts; however, some have not been formally listed.

Various sections of the *California Fish and Game Code* provide lists of Fully Protected reptile and amphibian (§ 5050), bird (§ 3511), and mammal (§ 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835. The CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research.

Fur-Bearing Mammals

Section 460 of the *California Fish and Game Code* prohibits the taking of the following fur-bearing mammals: fisher (*Martes pennanti*), American marten [marten] (*Martes americana*), North American river otter [river otter] (*Lontra canadensis*), desert kit fox (*Vulpes macrotis arsipus*), and red fox (*Vulpes vulpes*).

Natural Communities Conservation Planning Act

The Natural Community Conservation Planning Act, codified in Sections 2800–2835 of the *California Fish and Game Code* and signed into law on October 1991, authorizes the preparation of Natural Community Conservation Plans (NCCPs). The Act is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The purpose of an NCCP is to sustain and restore those species and their habitat identified by the CDFW that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. The NCCP process provides an alternative to protecting species on a "single species basis" as in the federal and State ESAs. Under the Act, the CDFW is responsible for creating process planning and conservation guidelines for NCCP programs. Local governments and landowners may then prepare the NCCPs so that they comply with the CESA.

Sections 1600 through 1616 of the California Fish and Game Code

California Fish and Game Code Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife

resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

California Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

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

Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Lake or Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

California Desert Native Plants Act

The California Desert Native Plants Act, codified in Sections 80001–80201 of the *California Food and Agricultural Code*, was enacted to protect California desert native plants from unlawful harvesting on both public and privately-owned lands. This Act is applicable within Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego counties. Within these counties, the Act prohibits the harvest, transport, sale, or possession of specific native desert plants without a valid permit or wood receipt and with the required tags and seals. The appropriate permits, tags, and seals must be obtained from the sheriff or commissioner of the County where collecting will occur; and the County will charge a fee.

Specific native plants, or any parts thereof, may not be harvested except for scientific or educational purposes and/or under a permit issued by the commissioner of the county in which the native plants are growing.

California Porter-Cologne Water Quality Control Act

Pursuant to the California Porter-Cologne Water Quality Control Act, the SWRCB and the nine RWQCBs may require permits (known as "Waste Discharge Requirements" or WDRs) for the fill or alteration of the waters of the State. The term "waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (*California Water Code*, Section 13050[e]). The SWRCB and RWQCB have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a "report of waste discharge" under Section 13260, which is treated as an application for WDRs.

Regional

California Desert Conservation Area Plan

In 1976, Congress passed the Federal Land Policy Management Act (FLPMA), which directs the management of public lands in the United States. Section 601 of the FLPMA directed the Bureau of Land Management (BLM) to prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of public lands within the California Desert Conservation Area (CDCA).

The CDCA Plan was prepared in 1980 to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield and the maintenance of environmental quality. The CDCA encompasses 25 million acres of desert land in Southern California, approximately 10 million of which is managed by the BLM.

The Plan established guidelines applicable to all multiple-use classes and to be followed throughout the public lands of the CDCA. The guidelines classify each area and determine the intensity of use: Controlled, Limited, Moderate, or Intensive Use. The decisions in this Plan apply only to public lands administered by the BLM.

West Mojave Plan

The West Mojave Plan is an amendment to the CDCA Plan that represents a collaboration of resource agencies, local jurisdictions, and others with a stake in the future of the western Mojave Desert. BLM is the federal Lead Agency, and the state Lead Agencies are the County of San Bernardino and the City of Barstow. The West Mojave Plan includes the West Mojave Desert area encompassing 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino Counties: 3.3 million acres of public lands administered by the BLM, 3.0 million acres of private lands, 102,000 acres administered by the State of California, and the balance of military lands administered by the Department of Defense. A Final Environmental Impact Report and Statement for the West Mojave Plan was prepared in 2005. While the USFWS issued a Biological Opinion for the federal portion of the plan in 2006, the State portion of the plan has not been permitted. Until the State portion of the plan is passed, it cannot be used by State or private entities.

The West Mojave Plan establishes a regional biological strategy to conserve plant and animal species and their habitats and prevent future listing and provides for an efficient, equitable, and cost-effective process for complying with Threatened and Endangered species law. The West Mojave Plan addresses desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), and over 100 species of plants and animals; designates Areas of Critical Environmental Concern and other special management areas specifically designed to promote species conservation; designates routes of travel on public lands; and establishes other management prescriptions to guide grazing, mineral exploration and development, recreation, and other public land uses.

Desert Renewable Energy Conservation Plan

In response to Executive Order S-14-08, which established a target of obtaining 33 percent of the state's electricity from renewable resources by 2020, the California Energy Commission (CEC), the CDFW, the BLM, and the USFWS have prepared the Desert Renewable Energy Conservation Plan (DRECP). The Plan area encompasses over 22 million acres of the Mojave and Colorado Desert regions in California, including all or a portion of the following counties: Kern, Los Angeles, San Bernardino, Inyo, Riverside, Imperial, and San Diego.

The DRECP is a joint State and federal NCCP and part of one or more Habitat Conservation Plans (HCPs) that are intended to provide for effective protection and conservation of desert ecosystems while allowing for the appropriate development of renewable energy projects. It is anticipated to provide long-term Threatened and Endangered species permit assurances to renewable energy developers and to provide a process for conservation funding to implement the DRECP. It would also serve as the basis for one or more HCPs under the ESA. The USFWS issued a Biological Opinion for Phase I of the DRECP covering federal (i.e., BLM) lands in 2015; this portion of the plan is now in effect. Development of Phase II, focusing on State and private lands, is currently underway. Until the State portion of the plan is passed, it cannot be used by State or private entities.

California City

Title 7, Chapter 8 of the City's Municipal Code regulates the planting and maintenance of trees in public places. The regulations include tree planting standards, tree care, tree pruning, and tree topping. Damaging trees, dumping harmful substances on trees, or piling building materials near trees and shrubs are prohibited.

4.4.2 EXISTING CONDITIONS

Natural Setting

The Project is located in the California Desert Province within the Western Mojave subregion. The Mojave Desert is a large, wedge-shaped basin covering approximately 32 million acres in California, Nevada, Utah, and Arizona. The Great Basin is to the north; the Apache Highlands and Colorado Plateau are to the east; the Colorado Desert, San Gabriel Mountains, and San Bernardino Mountains are to the south; and the Sierra Nevada Mountains and Tehachapi Mountains are to the west. The Project site is within an area referred to as the "High Desert." Elevations range from 282 feet below mean sea level (msl) in Death Valley to over 11,000 feet above msl in the Spring Mountains of Nevada and the Panamint Range in California. Common vegetation communities in the Mojave Desert include creosote bush scrub, shadscale scrub, alkali sink, and Joshua tree woodland.

The study area consists of the Project site, the utility alignment (including a 50-foot buffer), and a portion of the City's Wastewater Treatment Plant (WWTP). Topography in the vicinity of the Project site is generally moderately sloping and undulating. Elevations on the Project site range from approximately 2,700 feet above msl in the northeast corner to 2,550 feet above msl in the southwest corner. The utility alignment corridor consists of highly disturbed areas, including public road rights-of-way of Virginia Boulevard, Gordon Boulevard, 145th Street, Twenty Mule Team Parkway, Randsburg Mojave Road, and California City Boulevard. The eastern and central sections of this corridor are bound by undeveloped land while a mix of vacant lots and residential development occurs along the western section. Elevations along the utility alignment range from approximately 2,575 feet above msl at the eastern end to 2,445 feet above msl at the intersection of Yerba Boulevard and California City Boulevard. The elevation at the WWTP is approximately 2,331 feet above msl

Vegetation

Vegetation in the study area consists of creosote bush—white bursage scrub, disturbed creosote bush—white bursage scrub, creosote bush—white bursage scrub/allscale scrub, rubber rabbitbrush scrub, allscale scrub, rubber rabbitbrush—allscale scrub, and semi-natural herbaceous stand. Other landcover includes open water, ornamental, developed/ornamental, developed, and disturbed areas. The Project site is crossed by a network of small off-highway vehicle (OHV)

roads, which exhibit a high degree of disturbance and a lack of vegetation. The existing California City Correctional Center (CCCC) is located along the northwestern boundary of the Project site; undeveloped open land and dirt roads are located to the north, east, and south.

Creosote bush—white bursage scrub occurs throughout the Project site and along the eastern half of the utility alignment. This vegetation type has an open cover co-dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Individual shrubs are widely spaced, though the density of creosote bush is highest in the eastern half of the Project site. Other species noted in this vegetation type include white rabbitbrush (*Ericameria nauseosa* var. *hololeuca*), narrow-scaled cottonthorn (*Tetradymia stenolepis*), California buckwheat (*Eriogonum fasciculatum*), and silver cholla (*Cylindropuntia echinocarpa*). Common burrobrush (*Ambrosia salsola*), rayless goldenhead (*Acamptopappus sphaerocephalus*), and Cooper's box-thorn (*Lycium cooperi*) occur along the drainages.

Disturbed creosote bush—white bursage scrub occurs in vacant lots adjacent to residences and between dirt roads along the utility alignment. This vegetation type is also co-dominated by creosote bush and white bur-sage, but shrub cover is at lower densities than in creosote bush—white bursage scrub. Also, non-native annual grasses and weedy species, such as Russian thistle (*Salsola tragus*), make up a larger percentage of the shrub cover; and ground disturbance is present in some areas.

Creosote bush—white bursage scrub/allscale scrub occurs at the eastern edge of residential development in California City. This vegetation type represents a transition between creosote bush—white bursage scrub and allscale scrub and has a mix of creosote bush, white bur-sage, and allscale saltbush (*Atriplex polycarpa*) with no clear dominant species.

Rubber rabbitbrush scrub occurs in vacant lots adjacent to residences and along drainages of the utility alignment. This vegetation type is dominated by white rabbitbrush.

Allscale scrub occurs along a drainage at the eastern edge of residential development in California City. This vegetation type is dominated by allscale saltbush with a small amount of creosote bush.

Rubber rabbitbrush–allscale scrub occurs around the basins at the WWTP. This vegetation type is co-dominated by white rabbitbrush and allscale saltbush.

None of these vegetation types would be considered special status by CDFW.

Semi-natural herbaceous stands occur adjacent to development along the utility alignment and in patches at the WWTP. This vegetation type is dominated by non-native, weedy species such as Russian thistle, barbwire Russian thistle (*Salsola paulsenii*), eastern sisymbrium (*Sisymbrium orientale*), and grayish shortpod mustard (*Hirschfeldia incana*). These areas are considered relatively low in biological value compared to native habitat and would not be considered special status vegetation types.

Other land cover in the study area consists of open water, ornamental, developed/ornamental areas, developed areas, and disturbed land. During vegetation mapping, open water was observed in three of the basins at the WWTP (October 2020) and in a drainage adjacent to the road (water was present due to recent rain in January 2017). Ornamental and developed/ornamental areas occur in the western half of the utility alignment. Ornamental consists of a variety of planted landscaping species such as pine (*Pinus* sp.), palo verde (*Parkinsonia* sp.), common oleander (*Nerium oleander*), prickly-pear (*Opuntia* sp.), linear arched desert willow (*Chilopsis linearis* ssp. *arcuata*), and turf grass. Developed/ornamental consists of

structures (e.g., residences) with associated landscaping. Developed areas consist of paved roads and structures at the WWTP. Disturbed areas consist of dirt roads, unvegetated road shoulders, center medians, and unvegetated basin bottoms and graded operating areas of the WWTP; these areas contain less than five percent vegetation cover.

Table 4.4-1 provides the breakdown of vegetation types on the Project site, the utility alignment, and the WWTP. Exhibit 4.4-1 shows the general location of these vegetation types.

TABLE 4.4-1
VEGETATION TYPES AND OTHER AREAS IN THE STUDY AREA

	Amount (Acres)			
Vegetation Types and Other Areas	Project Site	Utility Alignment	Wastewater Treatment Plant	Threat Ranking
Creosote Bush–White Bursage Scrub	216.45	40.46	0.00	G5, S5
Disturbed Creosote Bush–White Bursage Scrub	0.00	4.10	0.00	G5, S5
Creosote Bush–White Bursage Scrub/Allscale Scrub	0.00	0.10	0.00	_
Rubber Rabbitbrush Scrub	0.00	0.39	0.00	G5, S5
Allscale Scrub	0.00	0.91	0.00	G4, S4
Rubber Rabbitbrush–Allscale Scrub	0.00	0.00	4.82	G4/G5, S4/S5
Semi-natural Herbaceous Stand	0.00	0.25	1.24	_
Ornamental	0.00	5.17	0.00	_
Open Water	0.00	0.08	2.65	_
Developed/Ornamental	0.00	2.04	0.00	_
Developed	0.00	53.75	1.42	_
Disturbed	0.08	41.42	14.01	_
Total	216.53	148.67	24.14	

G: Global; S: State.

Threat Ranking

- 4 Apparently secure and uncommon but not rare
- 5 Secure
- No threat rank

Source: Psomas 2020a.

Special Status Plants

Table 4.4-2 lists the special status plants reported in the project area and their presence or potential to occur on the site based on the results of focused survey efforts. Exhibit 4.4-2 shows the locations of special status species observed during surveys. Due to multiple years of drought, the first round of focused surveys were completed over multiple years between 2016 and 2019. Due to the piecemeal nature of the first round of surveys and the occurrence of good seasonal precipitation, a second round of surveys was conducted in spring 2020 to cover the entire project site for all species within the same year. The potential to occur in the table below is based on two rounds of focused surveys completed between spring 2016 and spring 2020.

		Status			Nearest Reported		
Species	USFWS	CDFW	CRPR	Species Background	Location/Habitat Suitability on the Project Site	Potential to Occur on the Project Site	Potential to Occur at the WWTP ^b
Calochortus striatus alkali mariposa-lily	_	I	1B.2	Alkaline meadows, moist creosote-bush scrub, chenopod scrub, Mojavean desert scrub, and chaparral; 2,625–4,593 feet above msl. Blooms April–June.	Reported approximately 5 miles southwest of the Project site (CDFW 2020a).	Not expected to occur based on lack of suitable habitat (moist alkaline soils). Additionally, not observed during 2016– 2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Canbya candida white pygmy-poppy	_	_	4.2	Sandy gravelly, or granitic soils in Joshua tree woodland, pinyon and juniper woodland, and Mojavean desert scrub; 1,969–4,429 feet above msl. Blooms April–May.	Reported approximately 8.5 miles northeast of California City (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Chorizanthe spinosa Mojave spineflower	_	ı	4.2	Sandy or gravelly, sometimes alkaline, soil in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas; 1,969–4,265 feet above msl. Blooms April–July.	Reported along SR-58 approximately 10 miles south of the Project site (CCH 2020).	Observed incidentally during 2017 burrowing owl surveys; not observed during subsequent surveys.	Limited potential to occur based on marginally suitable habitat.
Cryptantha clokeyi Clokey's cryptantha	_	ı	1B.2	Rocky to gravelly slopes and ridge crests in desert woodland and Mojavean desert scrub; 2,789–5,413 feet above msl. Blooms April–May.	Reported approximately 13 miles northeast of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat (rocky/gravelly substrate).
Cymopterus deserticola desert cymopterus	_	_	1B.2	Sandy soil in Joshua tree woodland and Mojavean desert scrub; 2,297–4,921 feet above msl. Blooms April.	Reported approximately 4.5 miles south of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat (sandy soils).

		Status			Nearest Reported		
Species	USFWS	CDFW	CRPR	Species Background	Location/Habitat Suitability on the Project Site	Potential to Occur on the Project Site	Potential to Occur at the WWTP ^b
Deinandra arida Red Rock tarplant	_	SR	1B.2	Clay and volcanic tuff in Mojavean desert scrub, washes, canyon slopes, and edges of springs and seeps; 1,969–3,281 feet above msl. Blooms April– November.	Reported approximately 10.6 miles northwest of the Project site (CDFW 2020a); known only from the Red Rock Canyon area.	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat (washes).
Deinandra mohavensis Mojave tarplant	_	SE	1B.3	Moist sites in openings of chaparral, desert scrub, woodland, coastal scrub, and riparian scrub; 1,509– 5,249 feet above msl. Blooms May–June.	Reported approximately 12.5 miles northwest of the Project site (CDFW 2020a).	Not expected to occur based on lack of suitable habitat (moist habitat). Additionally, not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Delphinium recurvatum recurved larkspur	_	_	1B.2	Poorly drained, fine, alkaline soils in grassland, chenopod scrub, and cismontane woodland; 98– 1,969 feet above msl. Blooms March–June.	Reported approximately 13.5 miles south and southeast of the Project site (CDFW 2020a).	Not expected to occur based on lack of suitable habitat (alkaline soils). Additionally, not observed during 2016– 2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Dudleya abramsii ssp. calcicola limestone dudleya	_	_	4.3	Carbonate soils in chaparral and pinyon and juniper woodland; 1,640–8,530 feet above msl. Blooms April– August.	Reported approximately 14 miles northwest of the Project Site (CCH 2020).	Not expected to occur based on lack of suitable habitat. Additionally, not observed during 2016– 2020 focused surveys.	Not expected to occur based on lack of suitable habitat.
Eremothera boothii ssp. boothii Booth's evening- primrose	_	_	2B.3	Sandy flats, steep loose slopes of Joshua tree and pinyon/juniper woodland; 2,953–7,874 feet above msl. Blooms June–August.	Reported approximately 15 miles east of the Project site (CCH 2020).	Not expected to occur based on lack of suitable habitat (woodlands). Additionally, not observed during 2016– 2020 focused surveys.	Not expected to occur based on lack of suitable habitat (woodlands).

	Status				Nearest Reported		
Species	USFWS	CDFW	CRPR	Species Background	Location/Habitat Suitability on the Project Site	Potential to Occur on the Project Site	Potential to Occur at the WWTP ^b
Eriophyllum mohavense Barstow woolly sunflower	_	_	1B.2	Creosote-bush scrub, chenopod scrub, and playas; 1,640–2,625 feet above msl. Blooms April– May.	Reported approximately 6 miles southwest of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Erythranthe rhodopetra Red Rock Canyon monkeyflower	_	_	1B.1	Sandy canyon washes in Mojavean desert scrub; 2,001–3,002 feet above msl. Blooms March–April.	Reported approximately 12 miles northwest of the Project site (CDFW 2020a); known only from the El Paso Mountains (CNPS 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat (washes).
Eschscholzia minutiflora ssp. twisselmannii Red Rock poppy	_	ı	1B.2	Volcanic tuff in Mojavean desert scrub; 2,231–4,035 feet above msl. Blooms March–May.	Reported approximately 10 miles northeast of the Project site (CDFW 2018a); known only from the Rand and El Paso Mountains (CNPS 2020).	Not expected to occur based on lack of suitable habitat (volcanic soils). Additionally, not observed during 2016– 2020 focused surveys.	Not expected to occur based on lack of suitable habitat (volcanic soils).
Euphorbia vallis-mortae Death Valley sandmat	_	_	4.2	Sandy or gravelly soil in Mojavean desert scrub; 755–4,790 feet above msl. Blooms May–October.	Reported approximately one mile north of the Project Site (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Goodmania luteola golden goodmania	_	-	4.2	Clay or alkaline soil in Mojavean desert scrub, grassland, playas, meadows, and seeps; 230– 7,218 feet above msl. Blooms April–August.	Reported approximately 10 miles south of the Project site (CCH 2020).	Not expected to occur based on lack of suitable habitat (clay or alkaline soils). Additionally, not observed during 2016– 2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Loeflingia squarrosa var. artemisiarum sagebrush loeflingia	_	_	2B.2	Sandy soil in desert dunes, Great Basin scrub, and Sonoran desert scrub; 2,297–5,299 feet above msl. Blooms April–May.	Reported approximately 10 miles south of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat.

		Status			Nearest Reported		
Species	USFWS	CDFW	CRPR	Species Background	Location/Habitat Suitability on the Project Site	Potential to Occur on the Project Site	Potential to Occur at the WWTP ^b
Mentzelia eremophila solitary blazing star	_	_	4.2	Canyons, rocky slopes and washes in creosote bush scrub and roadsides; 1,969–4,101 feet above msl. Blooms March–May.	Reported approximately 9 miles south of the Project site (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Mentzelia tridentata creamy blazing star	_	_	1B.3	Rocky, gravelly, or sandy soil in creosote-bush scrub; 2,297–4,265 feet above msl. Blooms April–May.	Reported approximately 14 miles north of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2017 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Muilla coronata crowned muilla	_	_	4.2	Open desert and woodland in chenopod scrub, Mojavean desert scrub, Joshua tree woodland, & pinyon & juniper woodland; 3,281–5,249 feet above msl. Blooms March–April.	Reported approximately 13.5 miles south of the Project site (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.
Nemacladus gracilis graceful nemacladus	_	_	4.3	Rocky or gravelly slopes and sandy washes in cismontane woodland and grassland; 0–6,234 feet above msl. Blooms March– April.	Reported approximately 14.5 miles southeast of the Project site (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys.	Not expected to occur based on lack of suitable habitat.
Phacelia nashiana Charlotte's phacelia	_	_	1B.2	Granitic, rocky, and sandy soils in Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland; 0–7,874 feet above msl. Blooms February–June.	Reported approximately 7.5 miles west of the Project site (CDFW 2020a).	Not expected to occur because not observed during 2016–2020 focused surveys.	Limited potential to occur based on marginally suitable habitat.

		Status			Nearest Reported		
Species	USFWS	CDFW	CRPR	Species Background	Location/Habitat Suitability on the Project Site	Potential to Occur on the Project Site	Potential to Occur at the WWTP ^b
Sclerocactus polyancistrus Mojave fish-hook cactus	_	_	4.2	Limestone soils in hills, canyons, and alluvial slopes in creosote-bush scrub, Great Basin scrub, and Joshua tree woodland; 2,461–6,890 feet above msl. Blooms April–June.	Reported approximately 15 miles north of the Project site (CCH 2020).	Not expected to occur because not observed during 2016–2020 focused surveys and the species is a persistent perennial; suitable habitat.	Not expected to occur based on lack of suitable habitat (limestone soils). Additionally, the species is a persistent perennial that would have been observable during the vegetation mapping.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank; msl: mean sea level; SR: State Route.

LEGEND:

State (CDFW): SR - Rare; SE - Endangered

CRPR

1B Plants Rare, Threatened, or Endangered in California and elsewhere

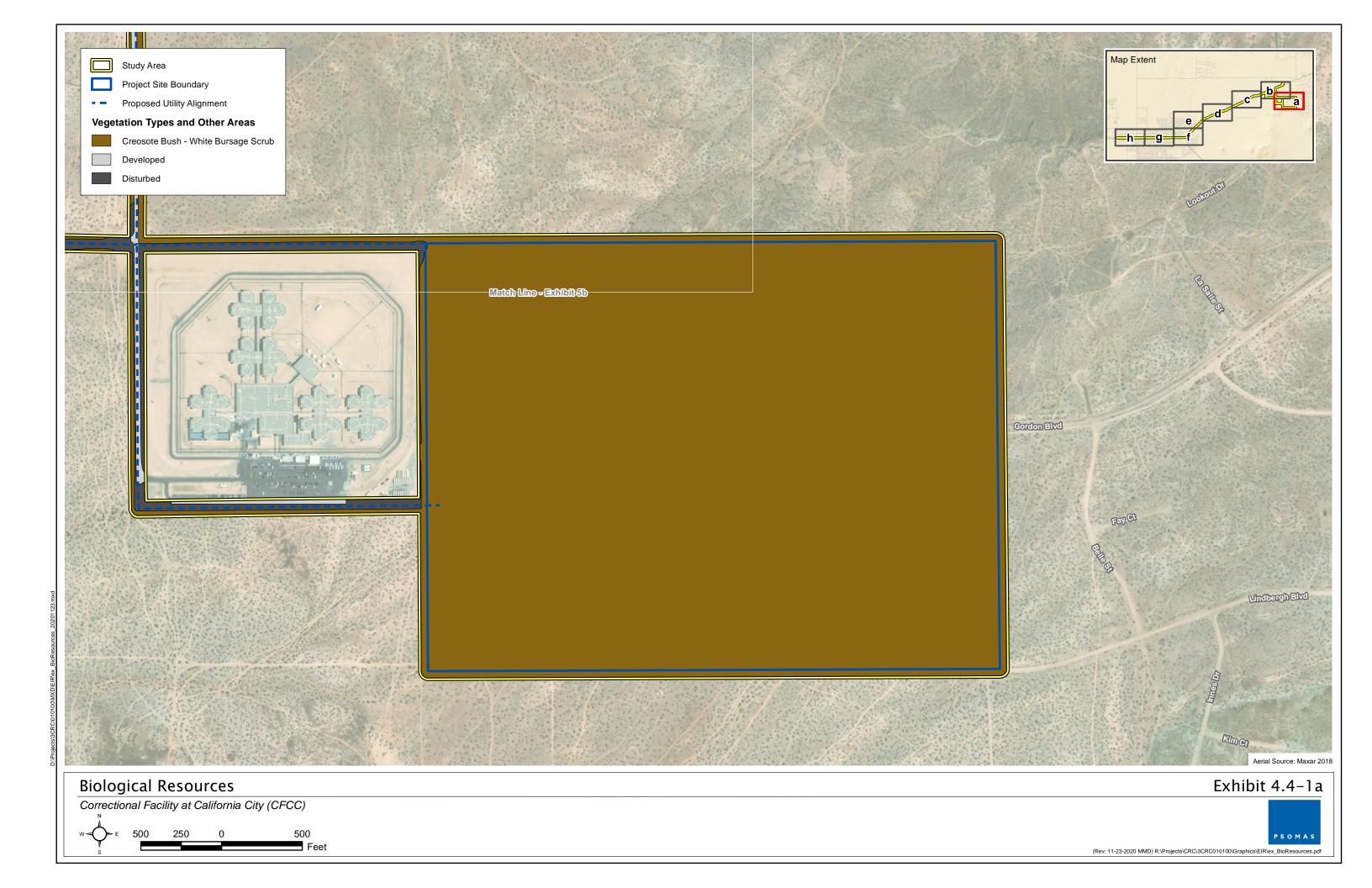
2B Plants Rare, Threatened, or Endangered in California but more common elsewhere

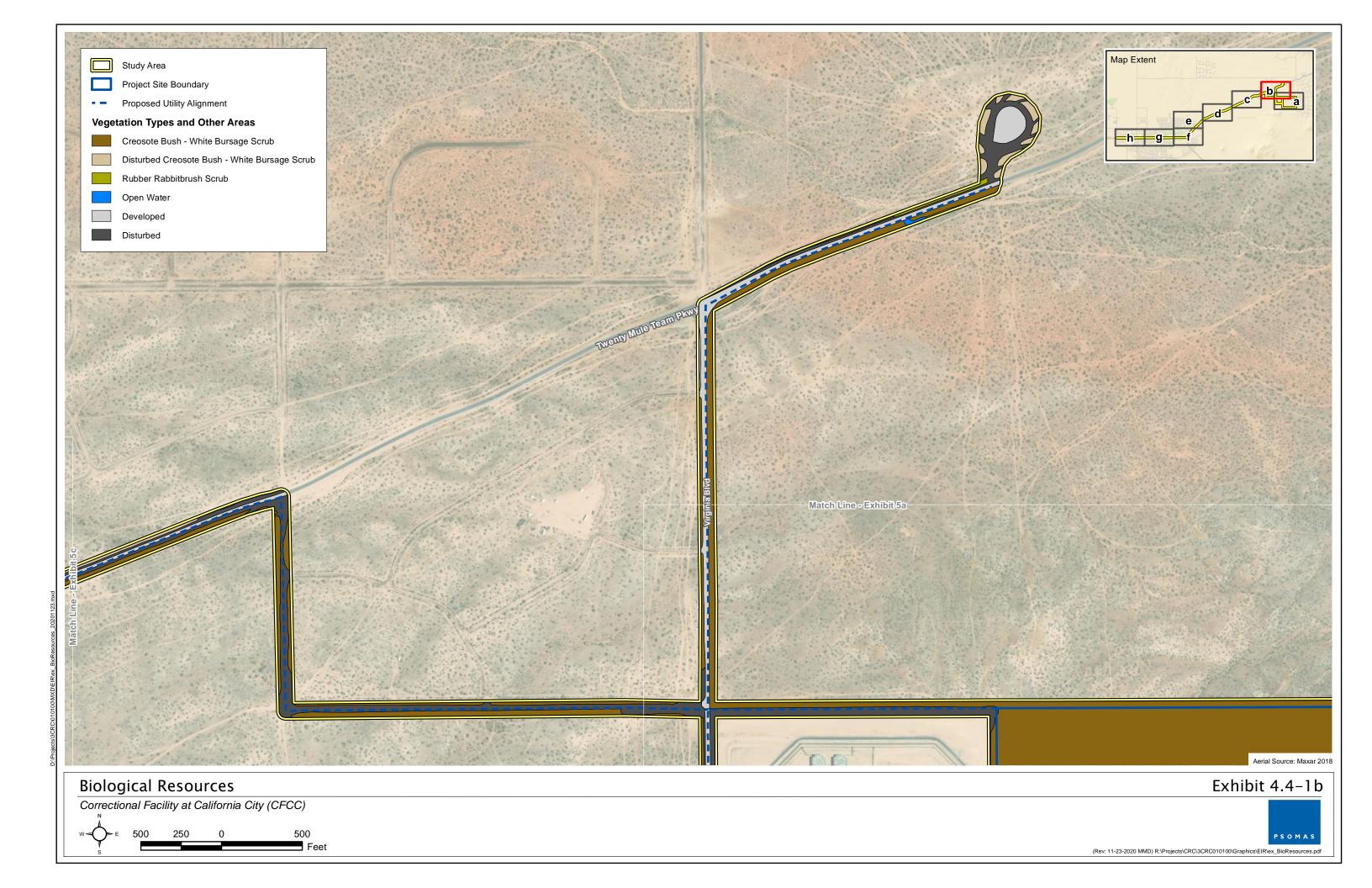
Plants of limited distribution – A Watch List

CRPR Threat Code Extensions

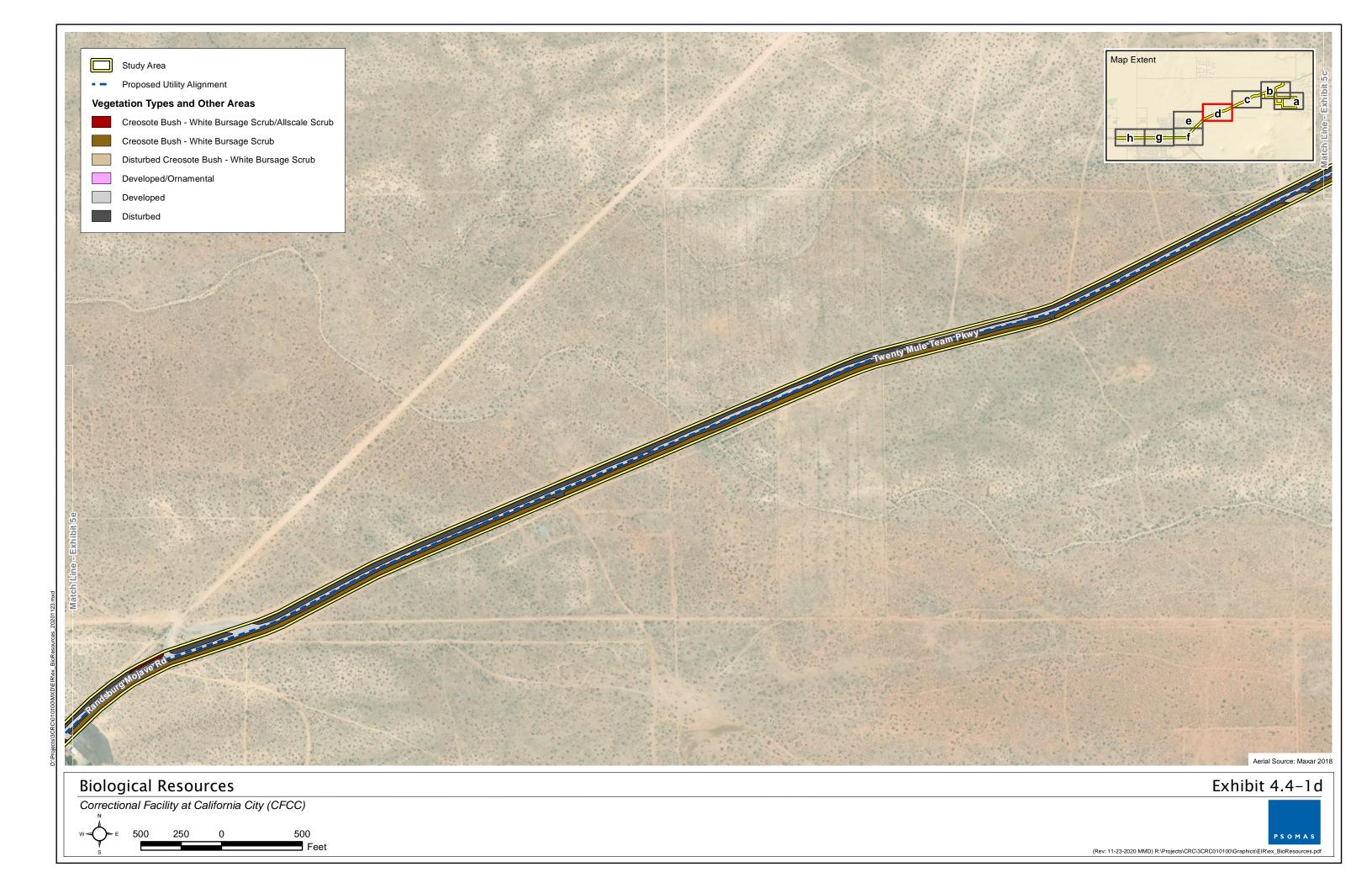
- .1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- .2 .3 Fairly threatened in California (20-80% of occurrences threatened; moderate degree and immediacy of threat)
- Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)
- Source of species background is CNPS (2018).
- Focused plant surveys have not yet been conducted at the WWTP.

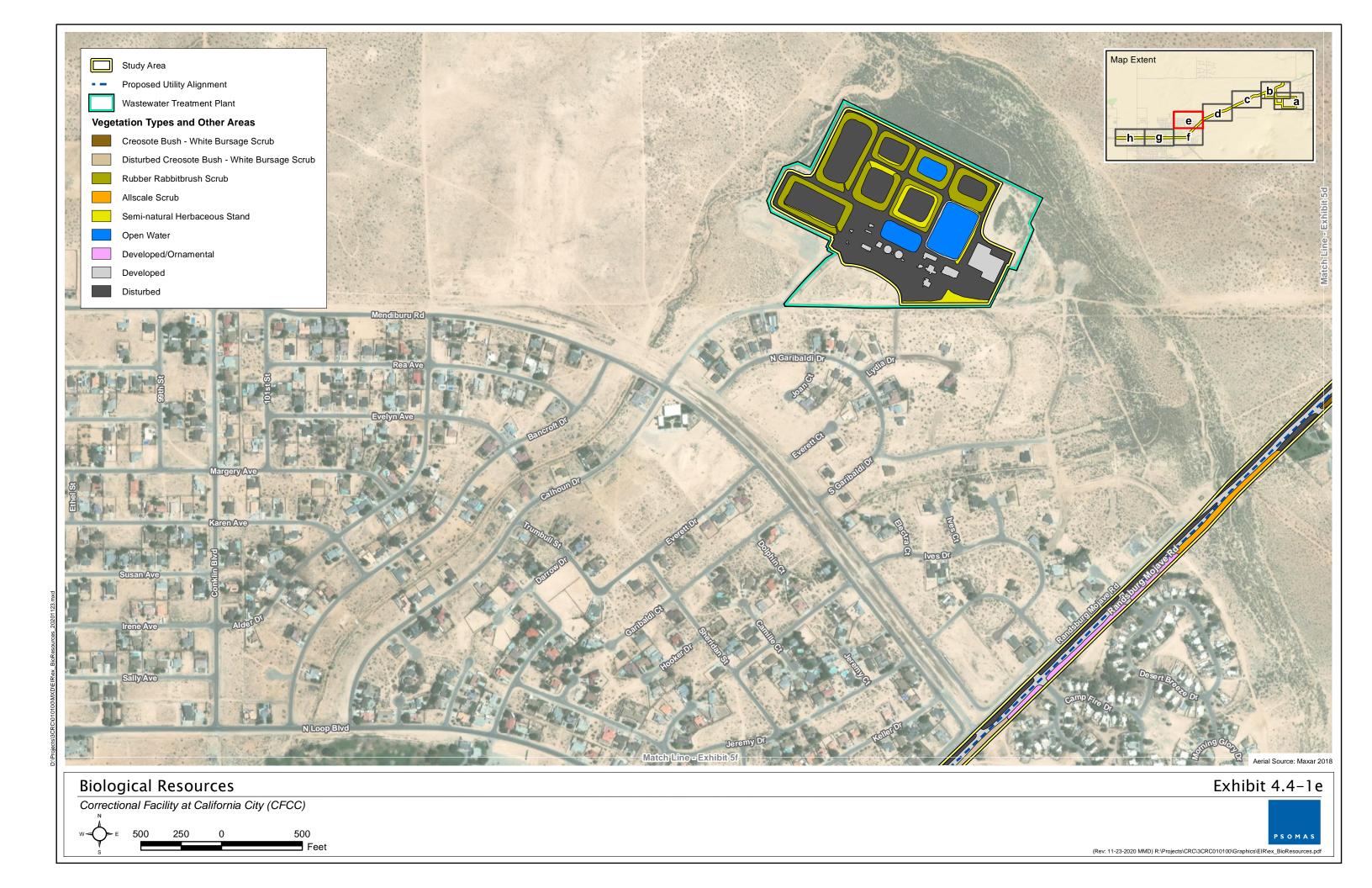
Source: Psomas 2020a.

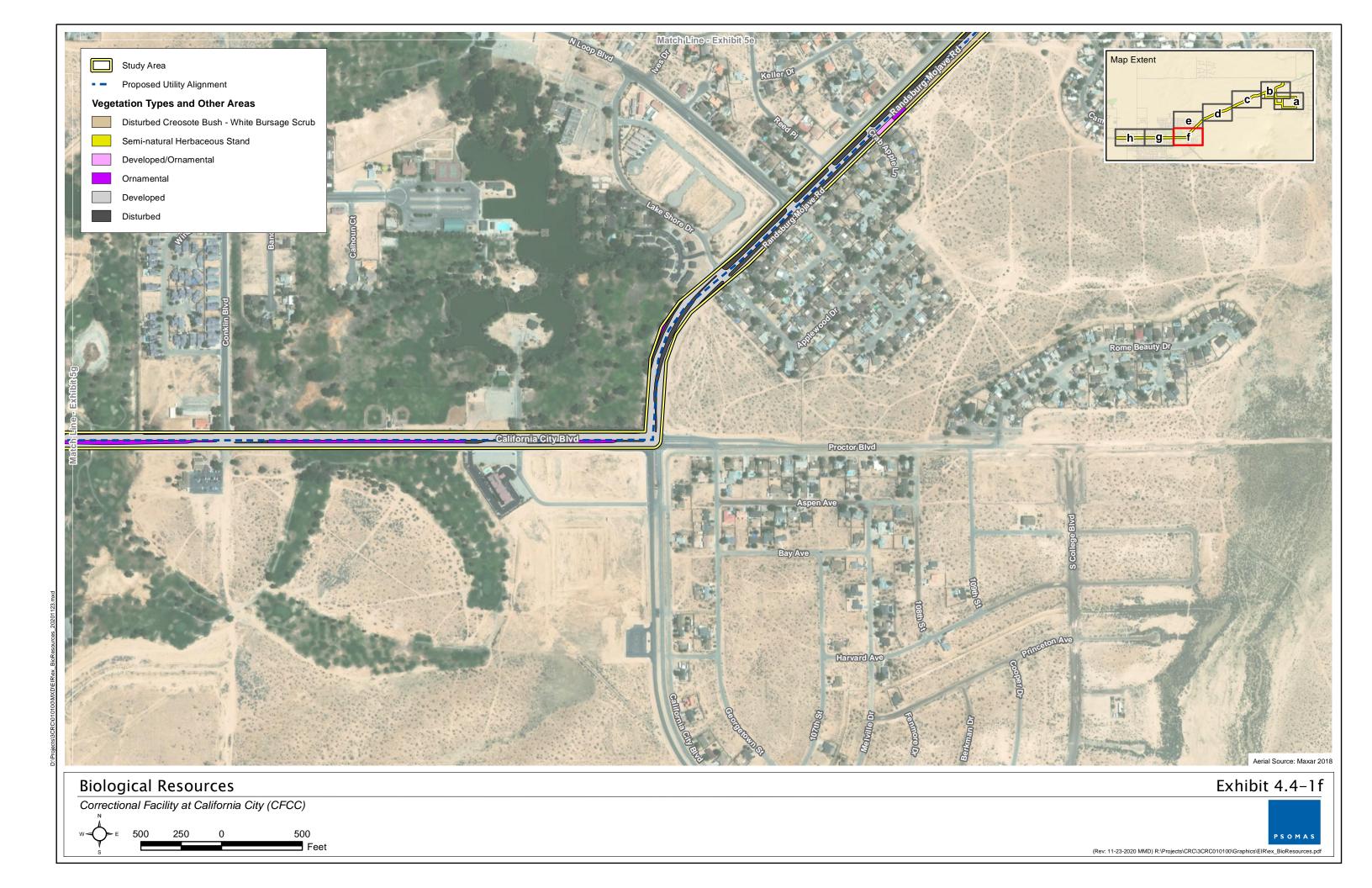


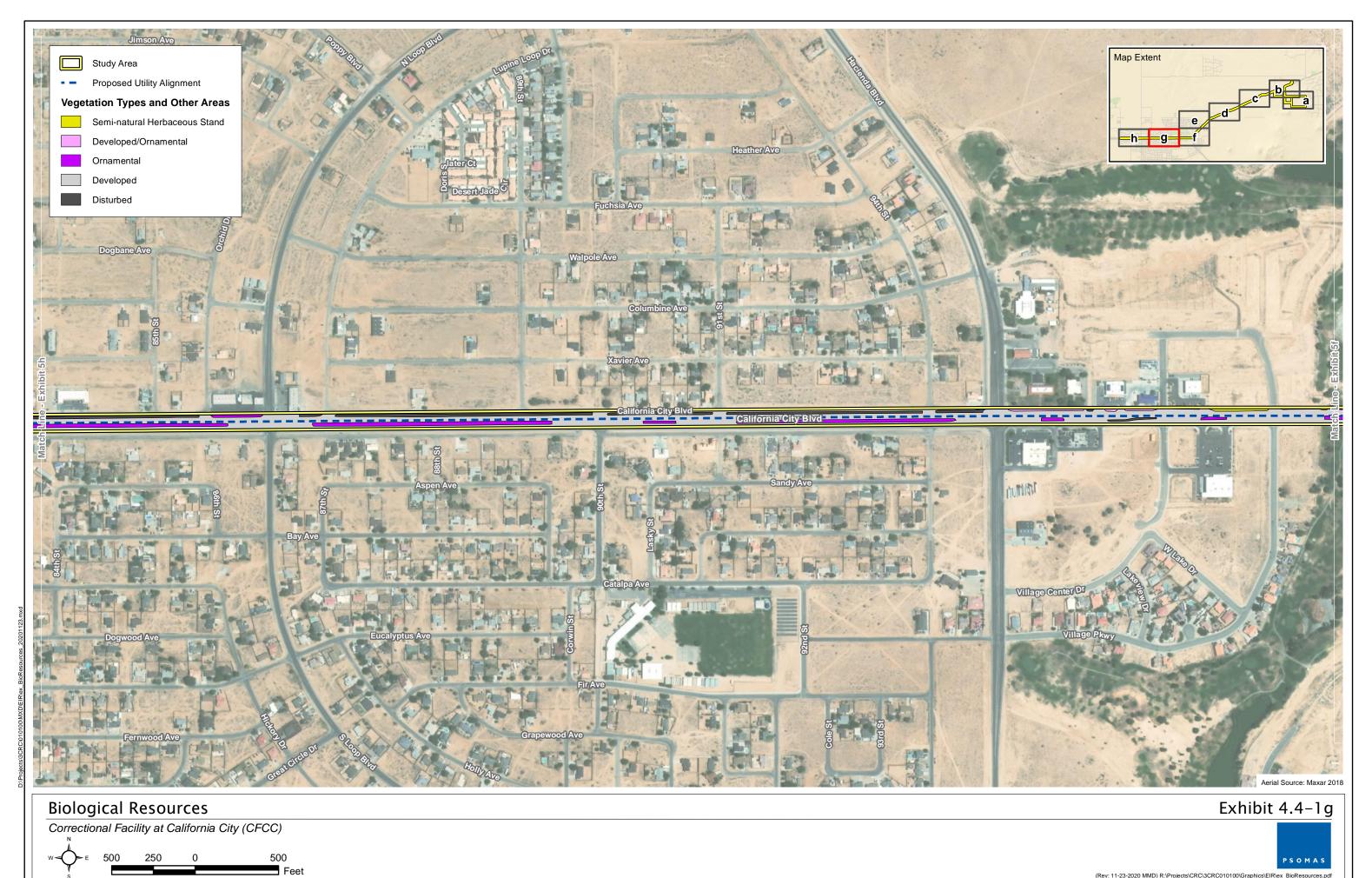




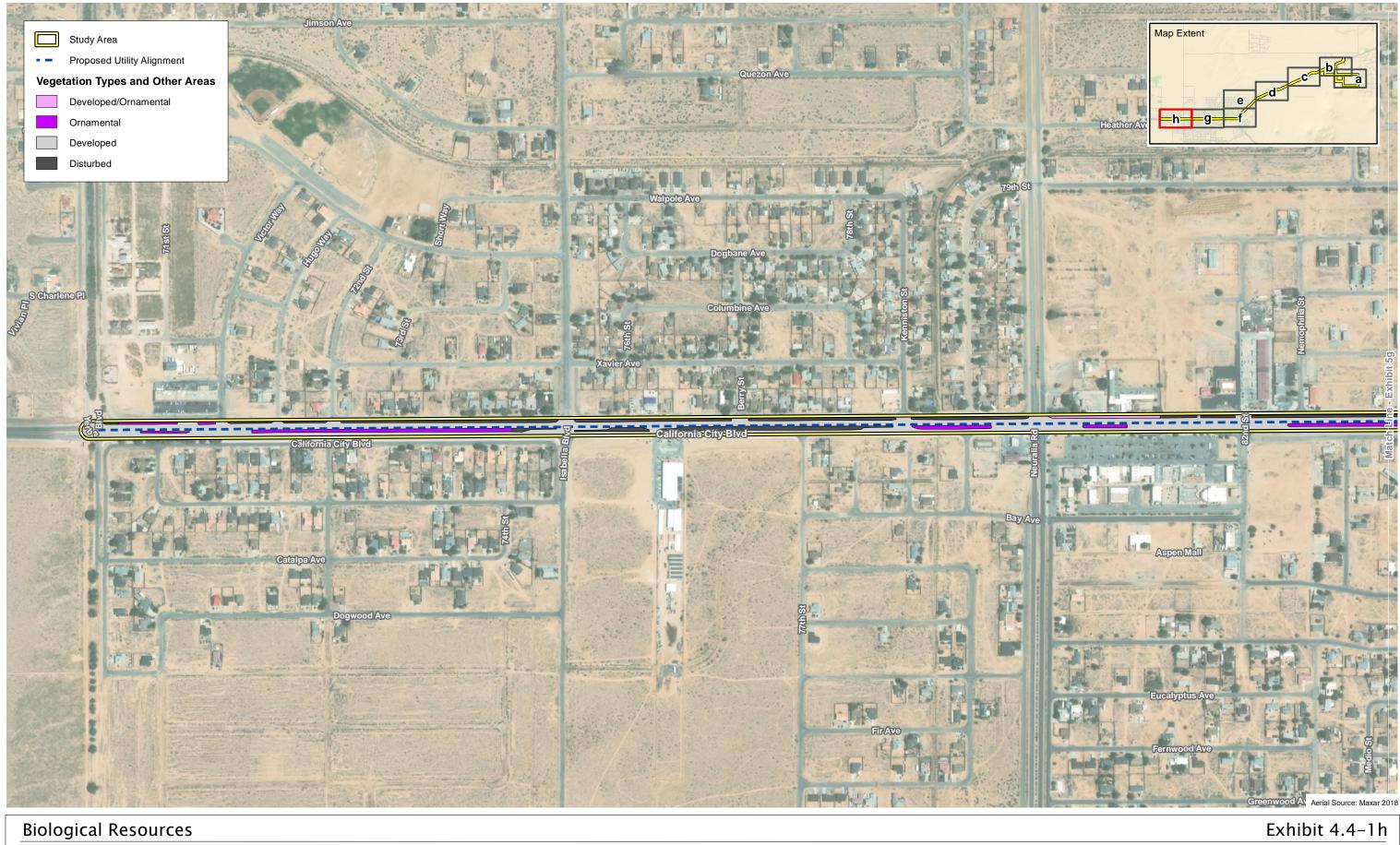








PSOMAS $(Rev: 11\text{-}23\text{-}2020 \text{ MMD}) \text{ R:} \\ \text{Projects} \\ \text{CRC} \\ \text{3CRC010100} \\ \text{Graphics} \\ \text{EIR} \\ \text{ex_BioResources.pdf}$



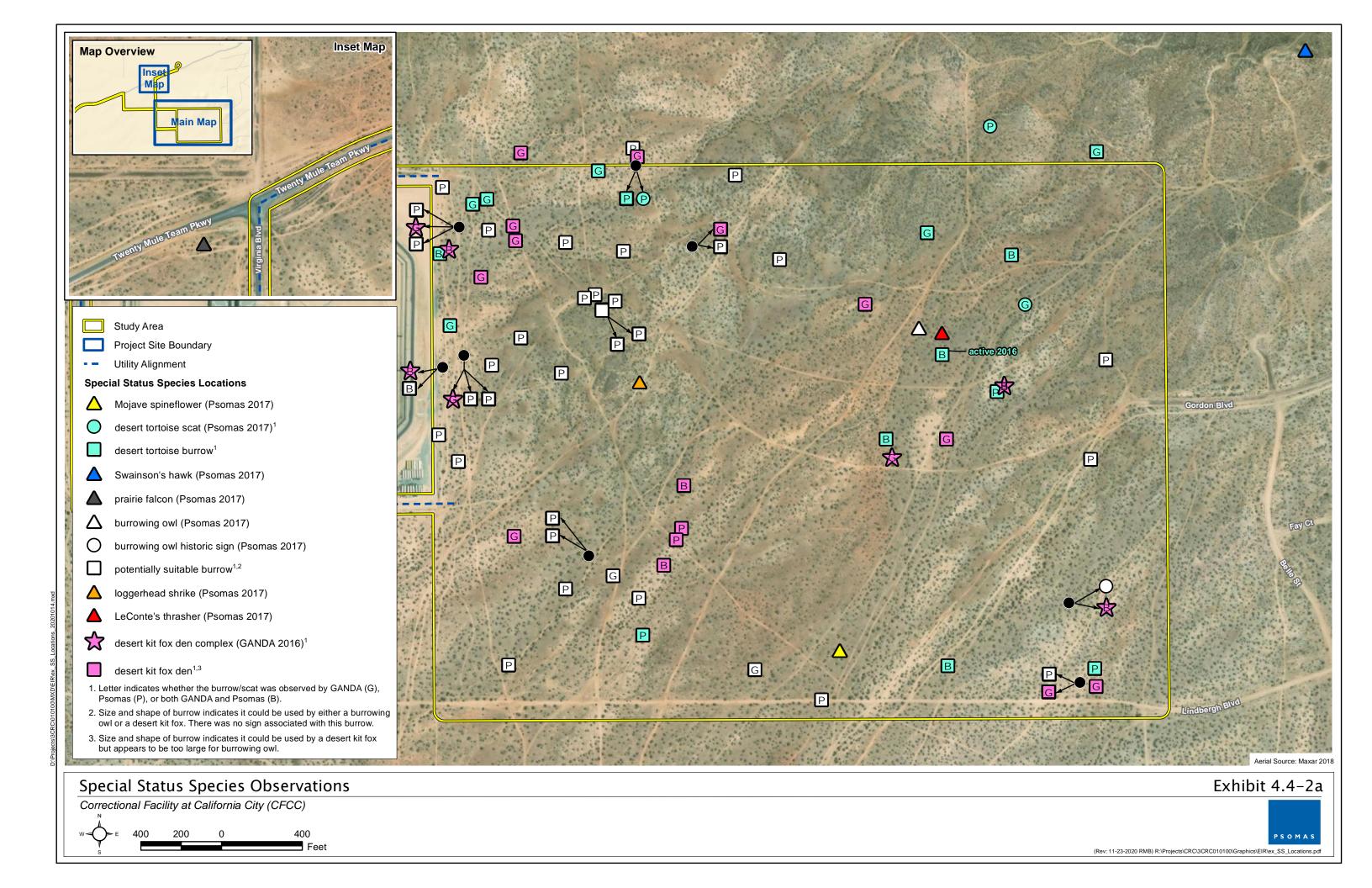
Correctional Facility at California City (CFCC)

w = 500 250 0 500

Feet

P S O M A S

(Rev: 11-23-2020 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\ex_BioResources.pdf





Special Status Species Observations

Correctional Facility at California City (CFCC)

W T 150 75 0 150

Feet (Rev. 11-23-2020 RMB) R:Projectsi/CRC/3CRC/010100/Graphics/leriex SS Locations.

One special status plant species, Mojave spineflower, was observed on the Project site. The remaining species would not be expected to occur because they were not observed during the focused surveys.

The utility alignment does not provide suitable habitat for any special status plant species because the alignment would be within the paved and maintained surfaces of existing roadways.

The following species have limited potential to occur at the WWTP: alkali mariposa lily (Calochortus striatus), white pygmy-poppy (Canbya candida), Mojave spineflower, Mojave tarplant (Deinandra mohavensis), recurved larkspur (Delphinium recurvatum), Barstow woolly sunflower (Eriophyllum mohavense), Death Valley sandmat (Euphorbia vallis-mortae), golden goodmania (Goodmania luteola), solitary blazing star (Mentzelia eremophila), creamy blazing star (Mentzelia tridentata), crowned muilla (Muilla coronate), and Charlotte's phacelia (Phacelia nashiana). Even though the WWTP contains marginal habitat, focused surveys would be required to determine the presence or absence of these species at the WWTP.

Mojave Spineflower

The Mojave spineflower has a California Rare Plant Rank (CRPR) of 4.2 and is considered a plant with limited distribution that has been included in the Watch List and considered fairly threatened in California. During the focused surveys for the burrowing owl in May 2017, the Mojave spineflower was incidentally observed. Three individuals were observed near the southern edge of the Project site in creosote bush—white bursage scrub vegetation. The plants were growing in sandy loam soil and were associated with creosote bush, common goldfields, and tessellated fiddleneck. Because this population was incidentally observed during a wildlife survey, not focused on plant species, it was unknown whether additional individuals/populations were present. However, given that this species was not detected during the 2016–2020 focused botanical surveys, it is expected that the number of individuals occurring on the Project site is small. Several populations are known from the Project region.

Wildlife

Vegetation in and adjacent to the study area provides potential habitat for a number of wildlife species. Common wildlife species observed or expected to occur in the study area and adjacent to the utility alignment.

A variety of bird species are expected to be residents in the study area, using the habitats throughout the year. Other species are present only during certain seasons. Common bird species observed in the study area include Eurasian collared-dove (*Streptopelia decaocto*), mourning dove (*Zenaida macroura*), lesser nighthawk (*Chordeiles acutipennis*), Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*), red-tailed hawk (*Buteo jamaicensis*), northern flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), olive-sided flycatcher (*Contopus cooperi*), Say's phoebe (*Sayornis saya*), loggerhead shrike (*Lanius ludovicianus*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), rock wren (*Salpinctes obsoletus*), sage thrasher (*Oreoscoptes montanus*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), lark sparrow (*Chondestes grammacus*), sagebrush sparrow (*Artemisiospiza nevadensis*), and whitecrowned sparrow (*Zonotrichia leucophrys*). A variety of waterfowl were observed at the WWTP basins, including wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), green-winged teal (*Anas crecca*), bufflehead (*Bucephala albeola*), and ruddy duck (*Oxyura jamaicensis*).

Small mammals observed in the study area include desert woodrat (*Neotoma lepida*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), and California ground squirrel (*Otospermophilus*

beecheyi). Other common small mammals that may occur in the study area include long-tailed pocket mouse (Chaetodipus formosus), Botta's pocket gopher (Thomomys bottae), and cactus mouse (Peromyscus eremicus). Medium to large-sized mammals, or their sign, observed include black-tailed jackrabbit (Lepus californicus), coyote (Canis latrans), and desert kit fox. European mouflon sheep (Ovis aries) are also grazed in the study area. Bat species that are either expected to occur or that may occur in the study area for foraging include canyon bat (Parastrellus hesperus), western mastiff bat (Eumops perotis californicus), and pallid bat (Antrozous pallidus). Canyon bat and pallid bat may also occur for roosting, while western mastiff bat would not be expected to roost on site due to the lack of suitable roosting habitat.

Common reptile species observed in the study area include long-nosed leopard lizard (*Gambelia wislizenii*), desert horned lizard (*Phrynosoma platyrhinos*), yellow-backed spiny lizard (*Sceloporus uniformis*), common side-blotched lizard (*Uta stansburiana*), Great Basin whiptail (*Aspidoscelis tigris tigris*), long-nosed snake (*Rhinochelius lecontei*), California kingsnake (*Lampropeltis californiae*), and northern Mojave rattlesnake (*Crotalus scutulatus*).

Because there is no water on the Project site, except immediately following rain, drainage features would not provide suitable habitat for fish, and no fish species are expected to occur. Because water at the WWTP is derived from wastewater effluent, no fish are expected to occur. Baja California treefrogs (*Pseudacris hypochondriaca*) are believed to have been introduced to California City (Stebbins 2003); however, they are likely limited to landscaped areas that are watered regularly and the basins at the WWTP. Other amphibian species are not expected to occur in the study area due to the lack of permanent water, desert washes, desert oases, moist vegetation types, and landscaped areas.

Special Status Wildlife

Special status wildlife species that have the potential to occur in the project area are listed in Table 4.4-3, including their legal status, habitat preferences, survey results, and potential to occur in the project area based on focused surveys conducted in spring/summer 2016 and spring/summer 2017. Exhibit 4.4-2 shows the locations of special status wildlife species observed on the site their sign, and/or potential burrows observed during the 2016, 2017, and 2020 surveys. Exhibit 4.4-3 highlights the desert tortoise observations, scat, and burrows observed during the 2016 and 2017 surveys. As shown, the desert tortoise, burrowing owl, and one active desert kit fox natal den were found on the Project site. Other special status wildlife species observed during surveys included osprey (*Pandion haliaetus*), Cooper's hawk (*Accipiter cooperii*), Swainson's hawk (*Buteo swainsoni*), prairie falcon (*Falco mexicanus*), olive-sided flycatcher (*Contopus cooperi*), loggerhead shrike, and LeConte's thrasher (*Toxostoma lecontei*).



	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Insects						
Bombus crotchii Crotch bumble bee	_	CSE	Occurs in open grassland and scrub habitats; nests underground. Feeds on milkweed (<i>Asclepias</i> sp.), pincushion (<i>Chaenactis</i> sp.), lupine (<i>Lupinus</i> sp.), alfalfa (<i>Medicago</i> sp.), phacelia (<i>Phacelia</i> sp.), and sage (<i>Salvia</i> sp.).	Reported in 1992 approximately 12 miles north of the study area (CDFW 2018a).	Limited potential to occur; believed to be absent from much of its historic range in the Central Valley; sheep grazing detrimental to bee populations; marginally suitable habitat.	Limited potential to occur; believed to be absent from much of its historic range in the Central Valley; marginally suitable habitat.
Reptiles						
Gopherus agassizii desert tortoise	FT	ST	Occurs in creosote bush scrub, Joshua tree woodland, and Mojave-saltbush-allscale scrub.	Reported approximately 5.5 miles northeast of the study area (CDFW 2018a).	Observed; one active burrow, recent sign (scat), and several Class 3 burrows observed during 2016 surveys.	Not expected to occur; exclusion fencing surrounds the facility.
Birds						
Ixobrychus exilis least bittern (nesting)		SSC	Breeds in freshwater and brackish marshes with tall, dense emergent vegetation. Forages in emergent vegetation.	Reported less than 1 mile south of the study area (eBird 2018).	Not expected to occur; lack of suitable habitat (marsh).	Not expected to occur; lack of suitable habitat (marsh).
Gymnogyps californianus California condor	Щ	SE, FP	Breeds in scrubby chaparral to forested montane regions subject to winter snowfalls (Finkelstein et al. 2015). Nests on overhanging cliff ledges, boulder pile crevices, potholes, deep caves, and burnout holes in coast redwoods and giant sequoia trees (Snyder et al. 1986). Forages in relatively open grassland and woodland regions as well as along coastlines (Snyder and Snyder 2000). Species is wide-ranging and can travel over 100 miles in one day of foraging (Snyder and Schmitt 2002).	Reported approximately 35 miles west of the study area (CDFW 2018a).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (cliffs).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (cliffs).

	Sta	itus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Pandion haliaetus osprey (nesting)		WL	Occurs along ocean shore, bays, freshwater lakes, and larger streams. Nests in treetops near waterbodies, but also on artificial structures such as utility poles.	Reported from the WWTP and multiple locations in the study area vicinity (ebird 2018).	Observed; suitable foraging habitat nearby. Not expected to occur for nesting on the Project site; lack of suitable habitat (trees/utility poles). Limited potential to occur for nesting along the utility alignment; limited suitable nesting habitat (utility poles).	May occur for foraging; suitable foraging habitat nearby. Not expected to occur for nesting; lack of suitable nesting habitat (trees/utility poles).
Accipiter cooperii Cooper's hawk (nesting)		WL	Forages in deciduous and mixed forests and open, interrupted, or marginal woodlands, Nests primarily in riparian growths of deciduous trees.	Reported from the WWTP and multiple locations in the study area vicinity (ebird 2018).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting on the Project site; lack of suitable nesting habitat (trees). Limited potential to occur for nesting along the utility alignment; limited suitable nesting habitat (trees).	Observed foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (trees).
Aquila chrysaetos golden eagle (nesting and wintering)	_	FP, WL	Breeds in open and semi-open habitats such as tundra, shrublands, grasslands, woodland-brushlands, coniferous forest, farmland, and riparian habitats (Kochert et al. 2002). Nests primarily in rugged mountainous areas with large trees or on cliffs (Johnsgard 2001). Forages in open habitats like grasslands or steppe-like vegetation (Hunt et al. 1999).	Reported approximately 2.5 miles southeast of the study area (CDFW 2018a).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (cliffs/large trees).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (cliffs/large trees).

	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Buteo swainsoni Swainson's hawk (nesting)		ST	Forages in open stands of grass-dominated vegetation; sparse shrublands; and small, open woodlands and has adapted well to foraging in agricultural areas (e.g., wheat and alfalfa) (Woodbridge 1991). Nests in scattered trees within these grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands) (Bechard et al. 2010).	Reported from the study area vicinity (ebird 2018), but species is wide ranging with a large home range size (England et al. 2010).	Observed foraging; suitable habitat. Incidentally observed northeast of the Project site during 2017 focused burrowing owl surveys. Not expected to occur for nesting on the Project site; lack of suitable habitat (trees/riparian woodlands). Limited potential to occur for nesting along the utility alignment; limited suitable nesting habitat (utility poles).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; lack of suitable nesting habitat (trees/riparian woodlands/utility poles).
Haliaeetus leucocephalus bald eagle (nesting and wintering)	delisted	SE, FP	Breeds in forested areas adjacent to large bodies of water. Nests in trees, rarely on cliff faces and ground nests in treeless areas (Sherrod et al. 1976). Typically forages in aquatic habitats, but also in arid areas (Buehler 2000). Species is wide-ranging with a large home range size (Buehler 2000).	Reported approximately 15 miles north of the study area (eBird 2018).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat (trees).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat (trees).
Falco mexicanus prairie falcon (nesting)	_	WL	Breeds in open habitat, including shrub- steppe desert, grasslands, mixed shrub and grasslands, and alpine tundra (Steenhof 2013). Forages in grassland and scrub. Nests on cliffs (Clark and Wheeler 2001).	Reported from the study area vicinity; location information suppressed due to species status (CDFW 2018a).	Observed foraging; suitable habitat. Incidentally observed along the utility alignment during 2016 surveys. Not expected to occur for nesting; no	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat (cliffs).

	Sta	itus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
					suitable nesting habitat (cliffs).	
Falco peregrinus anatum American peregrine falcon (nesting)	delisted	delisted, FP	Breeds in habitats that contain cliffs, for nesting on ledges, with open gulfs of air and generally open landscapes for foraging. Typically forages less than 5 miles from nesting sites (White et al. 2002).	Reported approximately 1 mile south of the study area (eBird 2018).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat (cliffs).	May occur for foraging; suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat (cliffs).
Charadrius alexandrinus nivosus western snowy plover (nesting)	FT*	SSC	In California, most breeding occurs on coastal dune-backed beaches, barrier beaches, and salt-evaporation ponds; infrequently on bluff-backed beaches; and offshore on Channel Island beaches (Page and Stenzel 1981). Nests on the ground often located with respect to some conspicuous feature in fairly barren landscapes (e.g., near a piece of kelp, driftwood, or small growing plant). Forages at beaches, tide flats, river mouths, lagoon margins, salt flats, salt ponds, lake shores, reservoirs, ponds, braided river channels, and playas (Page et al. 2009).	Reported approximately 9.5 miles north of the study area (CDFW 2018a).	Not expected to occur for foraging; no suitable habitat (evaporation ponds/beaches). Not expected to occur for nesting; no suitable nesting habitat (pond or lake shores/beaches).	May occur for foraging; suitable foraging habitat. Limited potential to occur for nesting; marginally suitable nesting habitat.
Charadrius montanus mountain plover (wintering)	_	SSC	Breeds outside California and winters from north-central California to the Mexican border. Forages in open, flat, dry tablelands with low, sparse vegetation (e.g., prairies, alkaline flats, and tilled fields), including disturbed areas (Knopf and Wunder 2006)	Reported approximately 9 miles northwest of the study area (CDFW 2018a).	May occur for foraging in winter; suitable foraging habitat. Not expected to occur for nesting; does not nest in the Project region.	May occur for foraging in winter; suitable foraging habitat. Not expected to occur for nesting; does not nest in the Project region.

	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Asio flammeus short-eared owl (nesting)	_	SSC	Breeds in open country (e.g., prairie and coastal grasslands, heathlands, shrubsteppe, and tundra) in northern U.S. and Canada; nests on the ground. Winters in open areas within woodlots, stubble fields, fresh and saltwater marshes, weedy fields, dumps, gravel pits, rock quarries, and shrub thickets (Wiggins et al. 2006).	Reported approximately 1 mile south of the study area (eBird 2018).	May occur for foraging in winter; suitable foraging habitat. Not expected to occur for nesting; does not breed in the Project region.	May occur for foraging in winter; suitable foraging habitat. Not expected to occur for nesting; does not breed in the Project region.
Athene cunicularia burrowing owl (burrow sites and some wintering sites)		SSC	Occurs in arid and semi-arid environments (e.g., grassland, steppes, deserts, prairies, and agricultural land) with well-drained, level to gently sloping areas with sparse vegetation (Haug et al. 1993; Dechant et al. 2003). Nests in mammal burrows and man-made cavities such as dry culverts.	Reported less than 1,500 feet from the study area and from multiple locations throughout the region (CDFW 2018a).	Observed; one pair observed in 2009 on the berm adjacent to the existing facility parking lot (CH2M Hill 2016); one individual observed during 2017 focused burrowing owl surveys; suitable habitat (desert habitat with burrows).	May occur for foraging and nesting; suitable foraging and nesting habitat.
Melanerpes lewis Lewis' woodpecker (nesting)		SA	Breeds in habitat including ponderosa pine forest, open riparian woodland dominated by cottonwood, logged or burned pine forest, and even oak woodland with an open canopy and a brushy understory (Bock 1970). Nests in cavities excavated in the trunk or large branches of large, dead or decaying trees, including burned trees (Vierling et al. 2013). Forages in air, on tree trunks and branches, in bushes, and on the ground (Vierling et al. 2013).	Reported approximately 1 mile south of the study area (eBird 2018).	Not expected to occur; lack of suitable habitat (forest/woodland).	Not expected to occur; lack of suitable habitat (forest/woodland).
Contopus cooperi olive-sided flycatcher (nesting)	_	SSC	Breeds in primarily montane and northern coniferous forests. Forages in forest clearings, semi-open forest, and over forest canopies where there are exposed perches (Altman and Sallabanks 2012).	Reported approximately 1 mile south of the study area (eBird 2018).	Migrant incidentally observed during 2016 surveys. Not expected to occur for nesting; no suitable habitat (forest).	Not expected to occur for nesting; no suitable habitat (forest). May be observed during migration.

	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Lanius ludovicianus loggerhead shrike (nesting)	_	SSC	Breeds in grasslands and other dry, open habitats. Nests in trees and shrubs that provide cover, usually with thorns. Forages in open landscapes characterized by well-spaced, often spiny, shrubs and low trees, usually interspersed with short grasses, forbs, and bare ground (Yosef 1996).	Reported approximately 5 miles south of the study area (CDFW 2018a).	Observed; incidentally observed near utility alignment during 2016 and 2017 focused burrowing owl surveys; suitable habitat.	May occur; suitable habitat.
Vireo vicinior gray vireo (nesting)		SSC	Breeds in mixed juniper/piñon and oak scrub associations and/or chaparral in hot, arid mountains and high plains scrubland. In Southern California, inhabits coastal montane chaparral where redshanks (<i>Adenostoma sparsifolium</i>), chamise (<i>A. fasciculatum</i>), and ceanothus (<i>Ceanothus</i> spp.) dominate (Grinnell and Swarth 1913). Forages in thickets (Hamilton 1962).	Reported approximately 4.5 miles northwest of the study area (CDFW 2018a).	Not expected to occur; no suitable habitat (thickets/chaparral).	Not expected to occur; no suitable habitat (thickets/chaparral).
Baeolophus inornatus oak titmouse (nesting)		SA	Breeds in warm, dry oak or oak-pine woodlands, and also in western juniper (Juniperus occidentalis), open pine forests (digger pine [Pinus sabiniana], Coulter pine [P. coulteri], Jeffrey pine [P. jeffreyi]), and single-leaf piñon (P. monophylla) or California juniper (J. californicus) mixed with Joshua trees (Yucca brevifolia) throughout California. Nests in natural tree holes or in woodpecker-excavated cavities. Primarily forages in oak woodland (Cicero 2000).	Reported approximately 1 mile south of the study area (eBird 2018).	Not expected to occur; no suitable habitat (oak/juniper/pine).	Not expected to occur; no suitable habitat (oak/juniper/pine).
Toxostoma bendirei Bendire's thrasher		SSC	Occurs in desert habitats and favors relatively open grassland, shrubland, or woodland with scattered shrubs or trees. Nests in shrubs, cacti, or trees, commonly in cholla (<i>Cylindropuntia</i> sp.), mesquite (<i>Prosopis</i> sp.), juniper (<i>Juniperus</i> sp.), Joshua tree and other species of yucca. Forages primarily on the ground but will	Reported approximately 20 miles northwest of the study area (CDFW 2018a).	Not expected to occur; outside known range.	Not expected to occur; outside known range.

	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
			also glean vegetation for insects and pluck fruit (Ambrose 1963). Study area outside known range for species.			
Toxostoma crissale Crissal thrasher		SSC	Occurs in desert washes and riparian thickets; also found in brushy plains, foothill scrub, or open piñon-oak-juniper (<i>Pinus-Quercus-Juniperus</i>) woodlands with a shrubby understory. Nests in the interior of the densest shrubs. Forages for insects and other arthropods on the ground and typically from excavations in litter or accumulated detritus beneath shrubs (Cody 1999). Study area outside known range for species.	Reported approximately 16 miles north of the study area (CDFW 2018a).	Not expected to occur; outside known range.	Not expected to occur; outside known range.
Toxostoma lecontei LeConte's thrasher	_	SSC	Occurs in sparsely vegetated desert flats, dunes, alluvial fans, and gently rolling hills typically with saltbush (<i>Atriplex</i> spp.) and/or cholla. Rarely found in creosote scrub. Nests in dense and thorny desert shrubs or cholla (Sheppard 1996).	Reported approximately one mile east of the study area (CDFW 2018a).	Observed; incidentally observed during 2017 focused burrowing owl surveys; suitable habitat.	May occur; suitable habitat.
Setophaga petechia sonorana Sonoran yellow warbler (nesting)	_	SSC	Breeds along the lower Colorado River; forages and nests in willow stands and revegetated cottonwoods (Shuford and Gardali 2008). Study area is outside known range for species.	Not reported in the vicinity of the study area.	Not expected to occur; outside known range; no suitable habitat (riparian).	Not expected to occur; outside known range; no suitable habitat (riparian).
Spizella breweri Brewer's sparrow (nesting)		SA	Breeds in shrublands dominated by big sagebrush (<i>Artemisia tridentata</i>) (Wiens and Rotenberry 1981); may occur in large openings in piñon-juniper (<i>Pinus edulus - Juniperus</i> spp.) woodlands (Sedgwick 1987) or large parklands within coniferous forests; nests and forages in sagebrush (Petersen and Best 1985, Stephens 1985).	Reported approximately 1 mile south of the study area (eBird 2018).	May occur; suitable habitat.	May occur; suitable habitat.

	Sta	tus		Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Agelaius tricolor tricolored blackbird (nesting colony)		SSC	Forages in grasslands, agricultural fields with low-growing vegetation, dairies, and feedlots (Shuford and Gardali 2008). Nests in marsh vegetation with bulrushes (Scirpus sp.) and cattail (Typha sp.), but also in willows (Salix sp.), blackberries (Rubus ursinus), and mustard (Brassica sp.) (Beedy et al. 1991).	Reported less than 1 mile south of the study area.	Not expected to occur; no suitable habitat (marsh/riparian/ agriculture).	Not expected to occur; no suitable habitat (marsh/riparian/agriculture).
Mammals					T	
Antrozous pallidus pallid bat	_	SSC	Occurs in a variety of habitats such as grasslands, shrublands, and woodlands, but most commonly in open habitats with rocky areas for roosting (Zeiner et al. 1990). Roosts in caves, crevices, mines, and occasionally hollow trees and buildings (Whitaker 1980; Zeiner et al. 1990).	Reported approximately 14 miles north of the study area (CDFW 2018a).	May occur for foraging and roosting; suitable foraging and roosting habitat.	May occur for foraging and roosting; suitable foraging and roosting habitat.
Corynorhinus townsendii Townsend's big- eared bat		SSC	Occurs in a variety of habitats such as oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows (Hall 1981). Roosts in mine tunnels, limestone caves, lava tubes, buildings, and other man-made structures (Williams 1986).	Reported approximately 14 miles north of the study area (CDFW 2018a).	May occur for foraging; suitable foraging habitat. Not expected to occur for roosting; no suitable roosting habitat (caves).	May occur for foraging and roosting; suitable foraging and roosting habitat.
Euderma maculatum spotted bat		SSC	Occurs in a variety of habitats such as arid desert, grassland, and mixed conifer forest (Zeiner et al. 1990). Roosts in rock crevices (Williams 1986).	Reported approximately 12 miles north of the study area (CDFW 2018a).	May occur for foraging; suitable foraging habitat. Not expected to occur for roosting; no suitable roosting habitat (rock crevices).	May occur for foraging; suitable foraging habitat. Not expected to occur for roosting; no suitable roosting habitat (rock crevices).

	Status			Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Eumops perotis californicus western mastiff bat		SSC	Forages in dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. Roosts primarily in cliffs high above the ground (WBWG 2005).	Reported approximately 40 miles south of the study area (CDFW 2018a)	May occur for foraging; suitable foraging habitat. Not expected to occur for roosting; no suitable roosting habitat (cliffs).	May occur for foraging; suitable foraging habitat. Not expected to occur for roosting; no suitable roosting habitat (cliffs).
Xerospermophilus mohavensis Mohave ground squirrel		ST	Occurs in Mojave desert scrub, alkali scrub, and Joshua tree woodland between 1,800 and 5,000 feet, in sandy to gravelly soils (Kern County Planning and Community Development Department 2012). Forages primarily on the leaves and seeds of forbs and shrubs (BLM 2006).	Reported from multiple occurrences between 0.5 and 5 miles from the study area (Leitner 2015).	Expected to occur; suitable habitat. Not observed during camera surveys of the study area in 2016, known from multiple nearby occurrences.	Limited; marginally suitable habitat (repeated disturbance).
Onychomys torridus tularensis Tulare grasshopper mouse	1	SSC	Inhabits low, open scrub and semi-scrub habitats (e.g., alkali desert scrub and desert scrub) in arid, Lower Sonoran associations. Forages for mostly small animals, with insects forming the bulk of their diets (Bolster 1998).	Reported approximately 15.5 miles north of the study area (CDFW 2018a).	May occur; suitable habitat.	May occur; suitable habitat.
Vulpes macrotis arsipus desert kit fox		FBM	Occurs in open desert, areas of desert scrub, grasslands, and sand dunes, in sandy and loamy soils (Kern County Planning and Community Development Department 2012). Forages in the same habitat and primarily eats rodents (McGrew 1979).	Known to occur immediately south of the existing CCCC facility (Psomas 2018).	Expected to occur; one active den and multiple potential burrows observed during 2016 and 2017 surveys; suitable habitat.	May occur; suitable habitat.

	Status			Nearest Reported	Potential to Occur	Potential to Occur
Species	USFWS	CDFW	Species Background	Location	on the Project Site	at the WWTP ^a
Taxidea taxus American badger		SSC	Occurs in a wide range of habitats, but is most abundant in drier, open stages of most shrub, forest, and herbaceous habitats with friable soil (CDFW 2014).	Reported approximately 6 miles northeast of the study area (CDFW 2018a). Known to occur immediately south of the existing CCCC facility (Psomas 2018).	Expected to occur; suitable habitat; known from adjacent project site.	May occur; suitable habitat.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife

LEGEND:

Federal (USFWS) State		State (C	ate (CDFW)			
FE FT	Endangered Threatened	SE ST CSE FP SSC WL	Endangered Threatened Candidate State Endangered Fully Protected Species of Special Concern Watch List			
		SA FBM	Special Animal (tracked by CNDDB) Fur-bearing Mammal (protected by Fur-bearing Mammal Act)			

Federal listing only applicable to the Pacific coastal population. No focused surveys have been conducted at the WWTP.

Source: Psomas 2020a.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is currently a Candidate for listing by the State. The CDFW has until July 2020 to review the petition, evaluate the available information, and report back to the Commission whether the petitioned actions are warranted (CDFW 2019). The Crotch bumble bee prefers grassland and scrub habitats. It is primarily associated with plants from the following families: *Fabaceae*, *Apocynaceae*, *Asteraceae*, *Lamiaceae*, and *Boraginaceae* (Richardson 2017, Thorp et. al. 1983). The Crotch bumble bee is a ground nester and often makes its nest in abandoned mammal burrows and can be found in most native habitat types. The Crotch bumble bee was historically common in the Central Valley but now appears to be absent from much of its historic range (Hatfield et.al. 2015). While the Project site has not been affected by agriculture, it is grazed by sheep. Numerous studies have found sheep grazing to be detrimental to bumble bee populations, likely due to the selective removal of flowers by sheep (Carvell 2002, Hatfield and LeBuhn 2007, Scohier et al. 2012). The Crotch bumble bee was reported in 1992 from the foothills of the Tehachapi Mountains, approximately 10 miles southwest of Garlick Road and Redrock Randsburg Road. Marginally suitable habitat is present for this species. Crotch bumble bee has a limited potential to occur in the study area.

Desert Tortoise

Desert tortoise is a federally and State listed Threatened species. It has two distinct populations, the Mojave and Sonoran. The Mojave population is divided into two subpopulations, the eastern and western Mojave. It has been suggested that these subpopulations could be divided into species, subspecies, distinct population segments, evolutionarily significant units, or management units; however, these designations remain unresolved. Within the western Mojave range, desert tortoise occur in creosote bush, cactus (*Opuntia* spp.), shadscale scrub habitats, and Joshua tree woodland between sea level and 4,000 feet above msl. Desert tortoise have unique characteristics that enable them to survive in a desert environment, such as elephantine limbs and well-developed claws that enable tortoises to burrow into desert soils to escape the heat of the day. Introduced plant species have greatly encroached upon native plant species in the desert tortoise's natural range and have degraded the existing natural ecosystem; however, desert tortoise have adapted to eating filaree (*Erodium* spp.) and other non-native plant species.

In 1994, the USFWS designated approximately 6.4 million acres as "critical habitat" for the Mojave population of the desert tortoise. The study area is not located within designated critical habitat for this species.

During the 2009 reconnaissance survey, an adult male tortoise was observed just south of the study area on the south side of Lindbergh Road (CH2M Hill 2016). Tortoise sign (burrows and scat) was also observed in the southeast corner of the Project site. During the 2016 focused surveys, an active desert tortoise burrow was found in the central portion of the Project site. During the same survey, recent tortoise scat (estimated to be a few weeks old at the time) was found approximately 500 feet northeast of the active burrow. The 2016 survey effort documented one Class 2¹ burrow, nine Class 3² burrows, and two Class 4³ burrows in the study area, indicating desert tortoise use over the past several years. Multiple potential desert tortoise burrows were incidentally observed on the Project site during the 2017 surveys; the class of each burrow was not rated, as desert tortoise was not the focus of the 2017 surveys. Exhibits 4.4-2 and 4.4-3 show the locations of desert tortoise burrows observed by GANDA in 2016 and by Psomas in 2017; some burrows were observed by both GANDA and Psomas. Suitable habitat for the desert

Class 2 burrows are in good condition, definitely desert tortoise; no evidence of recent use.

Class 3 burrows are in deteriorated condition (includes collapsed burrows); definitely desert tortoise

Class 4 burrows are in good condition; possibly desert tortoise.

tortoise is present throughout the study area, and the species is expected to occur on the Project site.

Desert tortoise exclusionary fencing is present around the WWTP; therefore, this species is not expected to occur in the WWTP as long as the fencing is maintained.

Mohave Ground Squirrel

The Mohave ground squirrel is a State Threatened species that is considered rare throughout its range and is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo counties. This species can be found in Mojave creosote bush scrub, shadscale desert scrub, alkali scrub, and Joshua tree woodland.

Habitat throughout the study area is suitable for the species, and multiple potentially suitable burrows were observed. No Mohave ground squirrels were incidentally observed during the 2016 or 2017 surveys. No Mohave ground squirrels were detected during focused camera monitoring that targeted the species; however, camera monitoring cannot conclusively establish absence of the species. The study area appears to support moderately suitable habitat, based on disturbance level (off-road vehicle activity), soil type, and the vegetative community. Based on the multiple records of this species in the vicinity, the Mohave ground squirrel is expected to occur.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. The species is a grassland specialist distributed throughout western North America, where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments, with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground. Burrowing owls often use "satellite," or non-nesting burrows, moving chicks into them from the nesting burrow, presumably to reduce the risk of predation and possibly to avoid nest parasites. One pair may use up to ten satellite burrows. Individual burrowing owls have a moderate to high site fidelity to previously used burrow complexes and often use the same burrows for nesting year after year.

During the 2009 biological reconnaissance survey, one pair of burrowing owls was observed in the southeastern corner of the parking lot of the existing CCCC facility; the active burrow was located on the north side of the berm that runs along the southern perimeter of the parking lot (CH2M Hill 2016). This burrow was revisited during the 2016 surveys; however, the burrow was no longer active. Despite the numerous potential burrows observed on the Project site, no burrowing owls were observed during the 2016 surveys. Focused surveys for burrowing owl were conducted on the Project site in spring/summer 2017. No breeding burrowing owls were observed during the surveys. However, one burrowing owl was observed in the central portion of the Project site on one survey visit. Because the owl had not been observed on any of the previous survey visits, and due to the timing of the observation in the season, it is assumed that this individual either occupied a burrow off site and was foraging on the Project site or was a young bird that was dispersing.

Potentially suitable burrows observed in 2016 and 2017 had no sign associated with the burrowing owl. One burrow complex was observed in the southeastern portion of the Project site that had old burrowing owl sign at its entrance. The sign consisted of approximately eight owl pellets that were greater than six months old; no new owl sign was observed at this burrow complex during the course of the focused surveys. Therefore, it is believed that this burrow complex was likely occupied during the previous winter season. Suitable habitat for this species is present throughout the study area.

American Badger

The American badger is a California Species of Special Concern and occurs throughout most of California in dry shrublands, forests, and grasslands with friable soils for burrowing. American badgers are mostly nocturnal and are active year-round, although they may go into torpor for periods in the winter. They may dig holes when foraging for burrowing rodents. American badgers have one litter of two to three young born in March to April. The American badger was observed foraging on an adjacent property, just south of the existing CCCC. Therefore, it is expected to occur on the Project site and throughout the study area.

Desert Kit Fox

While the desert kit fox is not federally or State listed as a special status species, it is protected under Title 14, *California Code of Regulations*, Section 460. The *California Fish and Game Code* (§§ 4000 - 4012) defines kit fox as a fur-bearing mammal and prohibits take of this species. Desert kit fox occurs in the arid regions of southern California, in annual grasslands, grassy openings, and open shrublands.

During the 2016 surveys, 13 single-entrance desert kit fox dens and 7 den complexes⁴ were observed in the study area. One of the den complexes showed sign of recent use (2016 breeding season), with puppy scat and prey remains scattered at some of the den entrances. Some of the single-entrance dens had scat nearby that was less than one year old. The dens are distributed throughout the Project site and show a range of conditions and use, indicating that the entire area is being used by desert kit fox. Additionally, one potential den and several recent kit fox tracks were incidentally observed during the 2017 surveys. Therefore, desert kit fox is expected to occur on the Project site and throughout the study area.

<u>Osprey</u>

Osprey is a Watch List species in California. This species breeds in North America from northwestern Alaska and across Canada south locally to Baja California, Mexico; the Yucatan Peninsula; the Bahamas; and Cuba (Johnsgard 1990). It winters in the Americas from central California, southern Texas, the Gulf coast, Florida, and Bermuda south through the West Indies, Central America, and South America. The species forages near waterbodies with an adequate source of fish. It should be noted that the city's central park (outside the study area) has a large lake that may have fish. Nest sites include dead or open-topped live trees near water, but also include rock outcrops, cliffs, and artificial structures such as utility poles.

Osprey was observed during 2016 surveys in the study area. Limited suitable foraging habitat is present in the study area. Utility poles and ornamental trees along the utility alignment and adjacent to the WWTP have potential to be used for nesting in the study area; however, no utility poles or ornamental trees are present on the Project site.

Cooper's Hawk

Cooper's hawk is a Watch List species in California. This species breeds from southern Canada, throughout the continental U.S., and into northwestern and north-central Mexico (Curtis and Rosenfield 2006). The wintering range is similar to the breeding range except the northernmost populations are migratory or partially migratory and the winter range extends throughout Mexico and possibly as far south as Panama (Curtis and Rosenfield 2006). Preferred nesting habitats are oak woodlands and riparian woodlands (Hamilton and Willick 1996). This species preys on

Den complexes were considered to be natal dens, which are larger and more complex than cover dens and have multiple entrances (GANDA 2016).

medium-sized birds and small mammals, foraging primarily in forest habitats (Curtis and Rosenfield 2006). This species is relatively tolerant of man-altered landscapes; however, threats to this species include the loss of appropriate woodlands for breeding and foraging; collisions with man-made objects; and possibly pesticides (Curtis and Rosenfield 2006).

The Cooper's hawk was observed perched at the WWTP during the 2020 vegetation mapping. Suitable foraging habitat is present throughout the study area. Ornamental trees along the utility alignment have potential to be used for nesting in the study area; however, no ornamental trees are present on the Project site or at the WWTP.

Loggerhead Shrike

Loggerhead shrike is a California Species of Special Concern. This species has a wide distribution across the United States, including south-central Canada and much of Mexico, but it has declined throughout much of this range in recent decades. The loggerhead shrike was considered to be a fairly common year-round resident in Southern California. It still occupies much of its former California range but has been extirpated locally or has shown reduction in overall numbers at many locations. Loggerhead shrikes breed mainly in shrublands or in open woodlands with a fair amount of grass cover and areas of bare ground.

A loggerhead shrike was incidentally observed during 2016 surveys along the utility alignment. Additionally, an individual was observed on the Project site during 2017 focused burrowing owl surveys. Suitable habitat for this species is located throughout the study area.

Swainson's Hawk

Swainson's hawk is a State listed Threatened species. This species breeds in the western United States and Canada with larger populations in the Central Valley and Great Basin; smaller populations are known from the western Mojave Desert, Antelope Valley, and Owen's Valley. The Swainson's hawk was historically a species adapted to open grasslands and prairies, but it has become increasingly dependent on agriculture as native plant communities have been converted to agricultural lands. It typically breeds in riparian woodlands but in desert habitats it also nests in Joshua trees, ornamental trees, and trees along roadsides.

The Swainson's hawk was incidentally observed foraging northeast of the Project site during the 2017 focused burrowing owl surveys; an individual was circling over an adjacent peak on two consecutive evenings. Suitable foraging habitat is present throughout the study area. Utility poles and ornamental trees along the utility alignment and adjacent to the WWTP have potential to be used for nesting in the study area; however, no utility poles or ornamental trees are present on the Project site.

Prairie Falcon

Prairie falcon is a Watch List species in California. This species occurs in a variety of habitats from grasslands to alpine meadows, most commonly in grasslands, savannahs, rangelands, agricultural areas, and desert scrub habitats. The prairie falcon was incidentally observed foraging along the utility alignment during 2017 surveys for an adjacent project. Suitable foraging habitat is present throughout the study area. However, there are no cliffs in the study area; therefore, this species is not expected to occur for nesting in the study area.

Olive-Sided Flycatcher

Olive-sided flycatcher is a California Species of Special Concern. This species is a long-distance migrant between its North American breeding grounds and Central and South American wintering

grounds. This species occurs in edges, opening, and natural or human-made clearings in relatively dense forests; they can also occupy semi-open forests. This species was incidentally observed in the study area during the 2016 surveys. As the study area does not contain suitable nesting habitat for this species, it is assumed that the individual was a migrant.

LeConte's Thrasher

LeConte's thrasher is a California Species of Special Concern. This species is a resident of the deserts of the southwestern United States and northwestern Mexico. It typically occurs with saltbush (*Atriplex* spp.) and/or cholla (*Cylindropuntia* spp.) and is rarely found in creosote scrub. It nests in dense and thorny desert shrubs or cholla. A LeConte's thrasher was incidentally observed on the Project site during the 2017 focused burrowing owl surveys. Suitable habitat for this species is present throughout the study area.

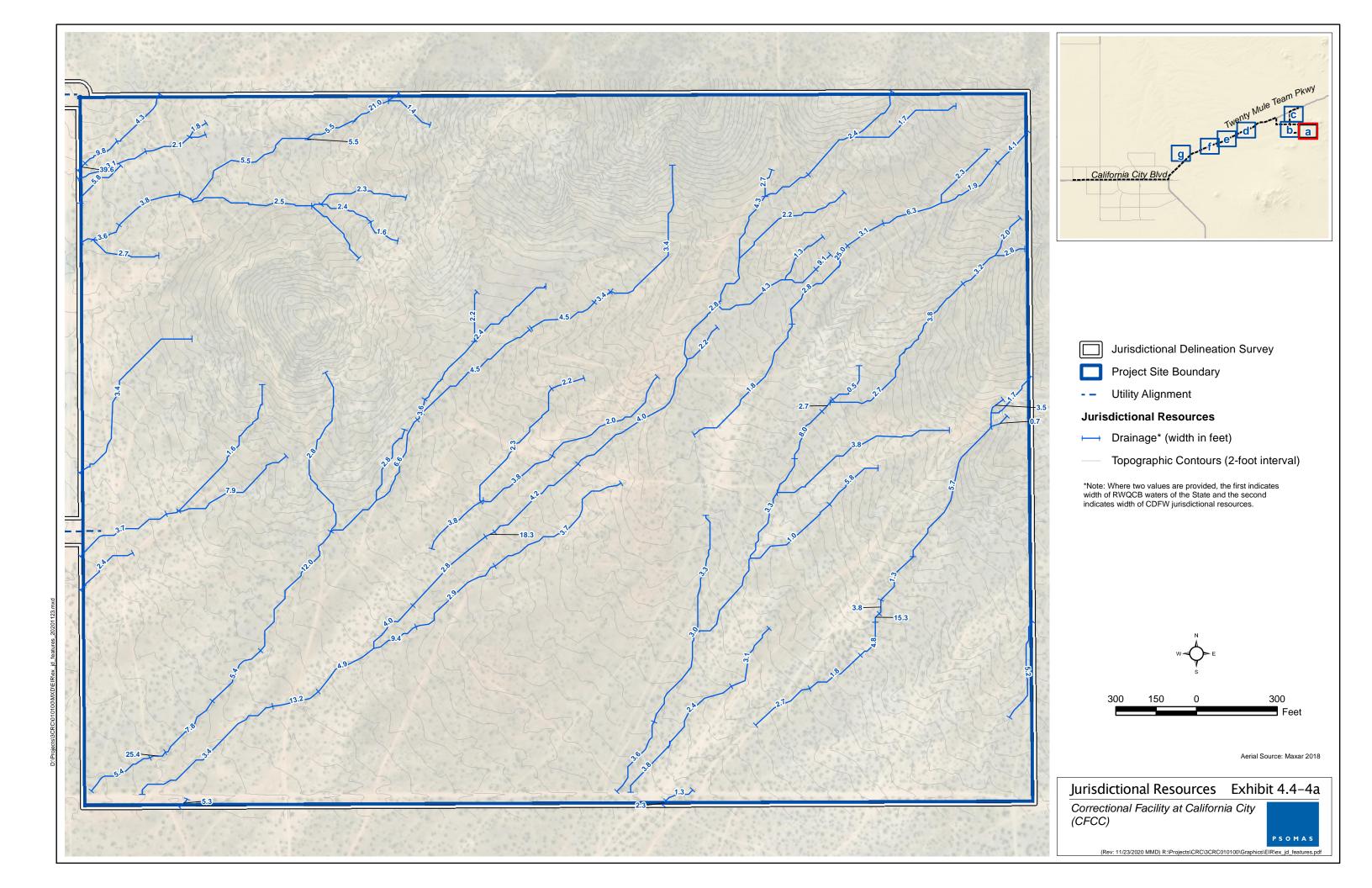
Jurisdictional Wetlands and Waters

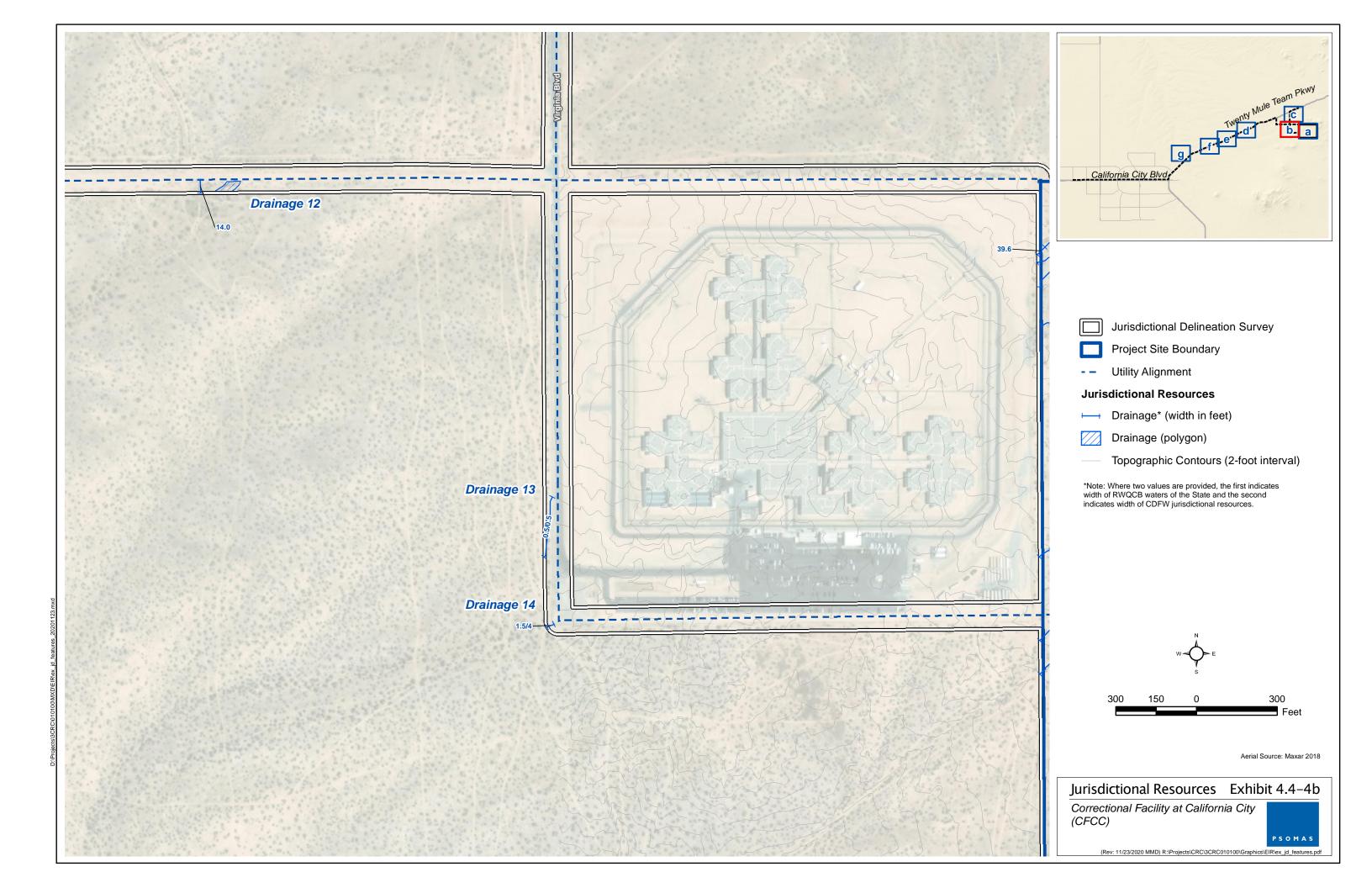
A jurisdictional delineation was prepared to determine the presence of "waters of the U.S." under the regulatory authority of the USACE; "waters of the State" under the regulatory authority of the Lahontan RWQCB; and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation) under the regulatory authority of the CDFW in the study area.

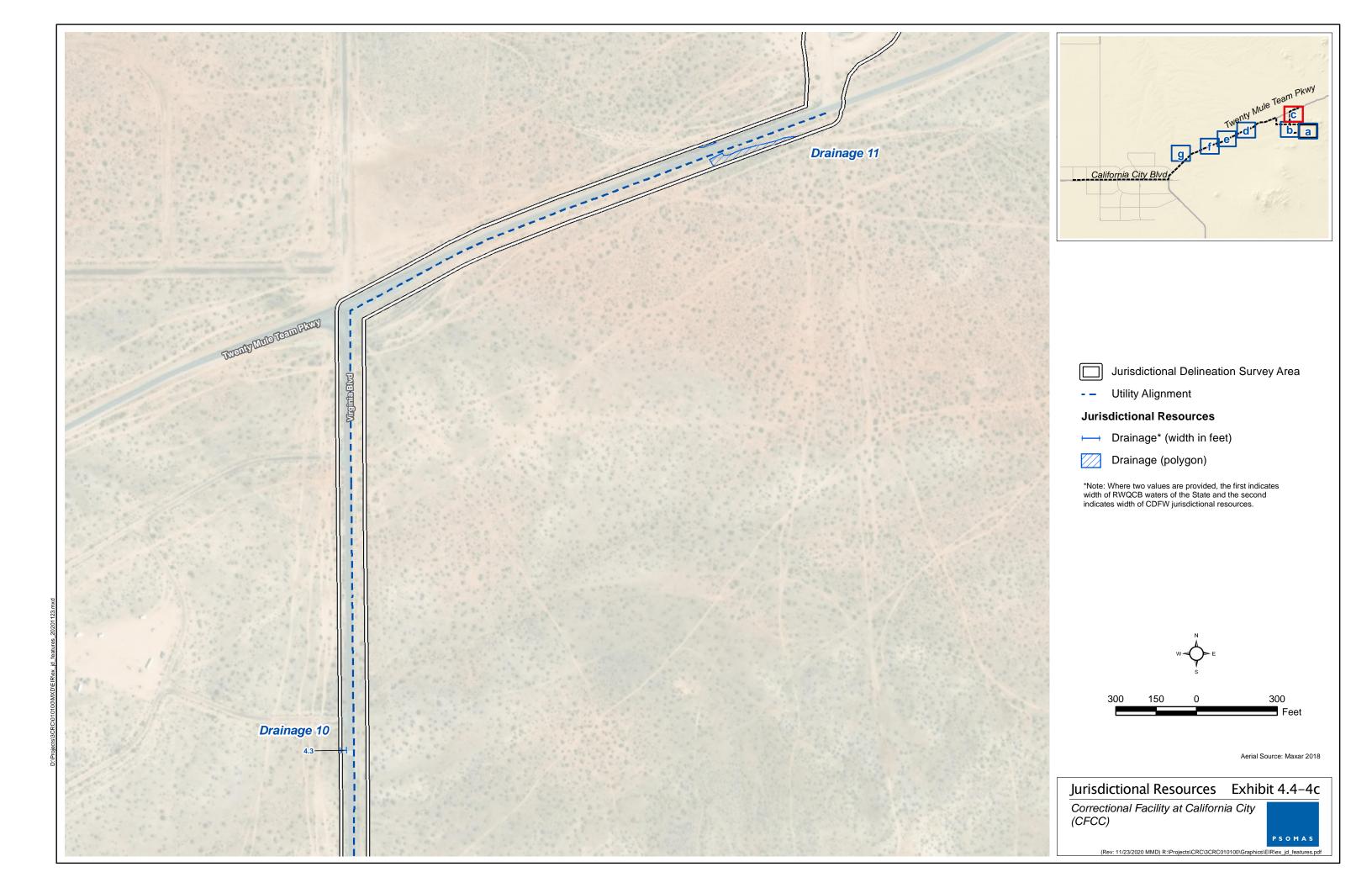
Potential jurisdictional resources mapped in the study area consist of drainage features and artificial basins. The drainage features mapped in the jurisdictional delineation are episodic streams that contain surface water only immediately following storm events. Some of these drainage features likely dissipate into uplands either on or off site; however, others are tributaries of larger streams. The drainages in the northwestern portion of the Project site and along the utility alignment are tributaries of Cache Creek, which ultimately drains into the area around Koehn Lake north of the study area. The drainages in the southeastern portion of the Project site coalesce and drain to the south, near Rogers Lake. Both Koehn Lake and Rogers Lake are dry lakebeds. Because these drainages and dry lakebeds are not navigable, are not interstate waters, and do not have a role in foreign or interstate commerce, they are not considered waters of the United States. Therefore, drainages in the study area do not have connectivity to a Traditional Navigable Water (TNW) and are not under the jurisdiction of USACE. Although there have been recent changes in the delineation of USACE jurisdiction, the changes would not change the jurisdiction of the drainages on the Project site. The artificial basins at the WWTP are isolated and do not have connectivity to a TNW. Therefore, they are not under the jurisdiction of the USACE.

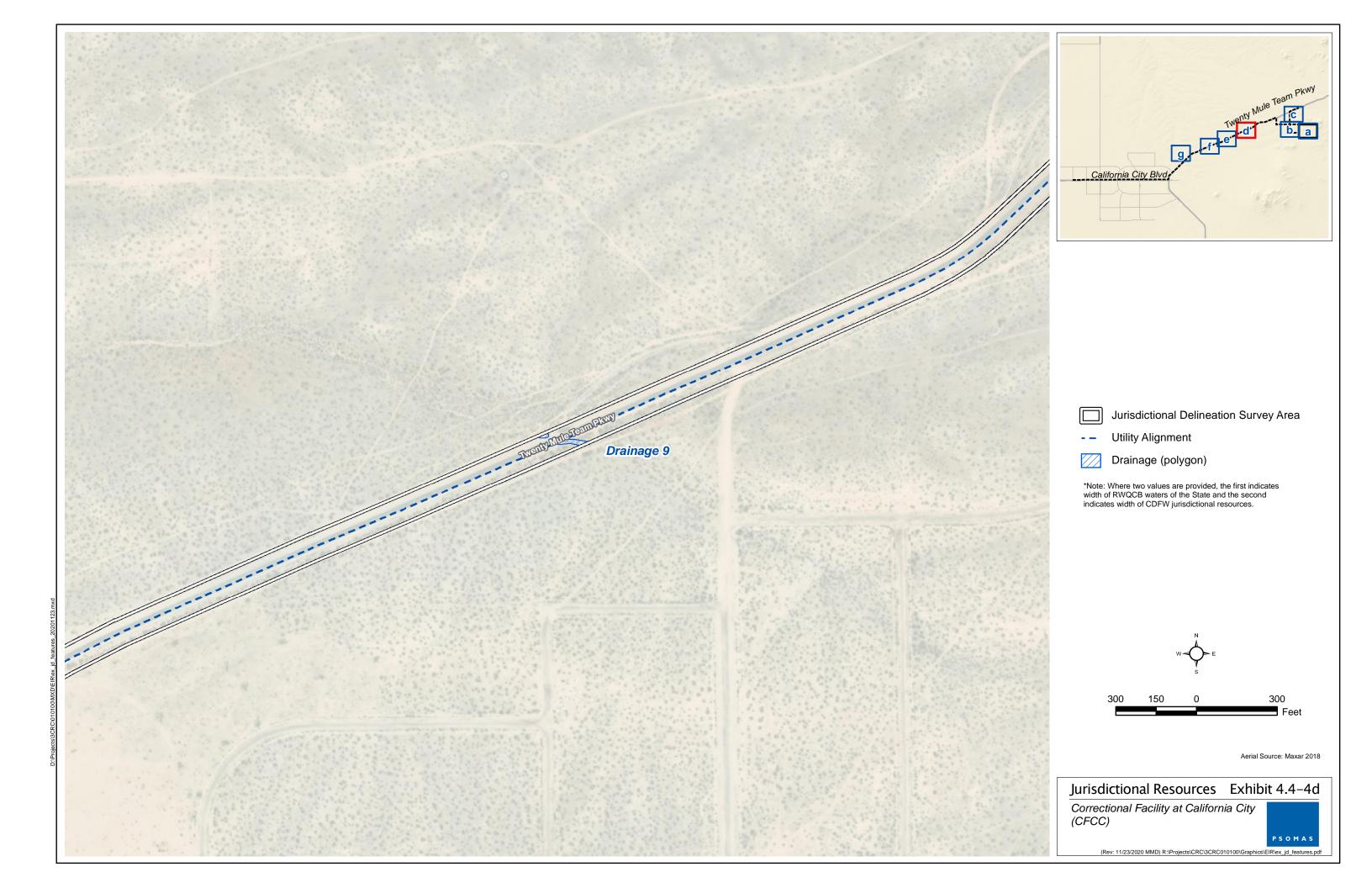
Approximately 10.659 acres of isolated "waters of the State" potentially under the jurisdiction of the RWQCB (2.989 acres on the Project site, 0.022 acre along the utility alignment, and 7.648 acres at the WWTP) occur in the study area. Approximately 16.745 acres of waters potentially under the jurisdiction of the CDFW (2.989 acres on the Project site, 0.414 acre along the utility alignment, and 13.342 acres at the WWTP) occur in the study area. Approximately 31,908 linear feet of jurisdictional water resources occur on the Project site. In addition, drainage features totaling 307 linear feet were observed along the utility alignment. Although there have been recent changes in the delineation of RWQCB jurisdiction, the changes would not change the jurisdiction of the drainages in the study area.

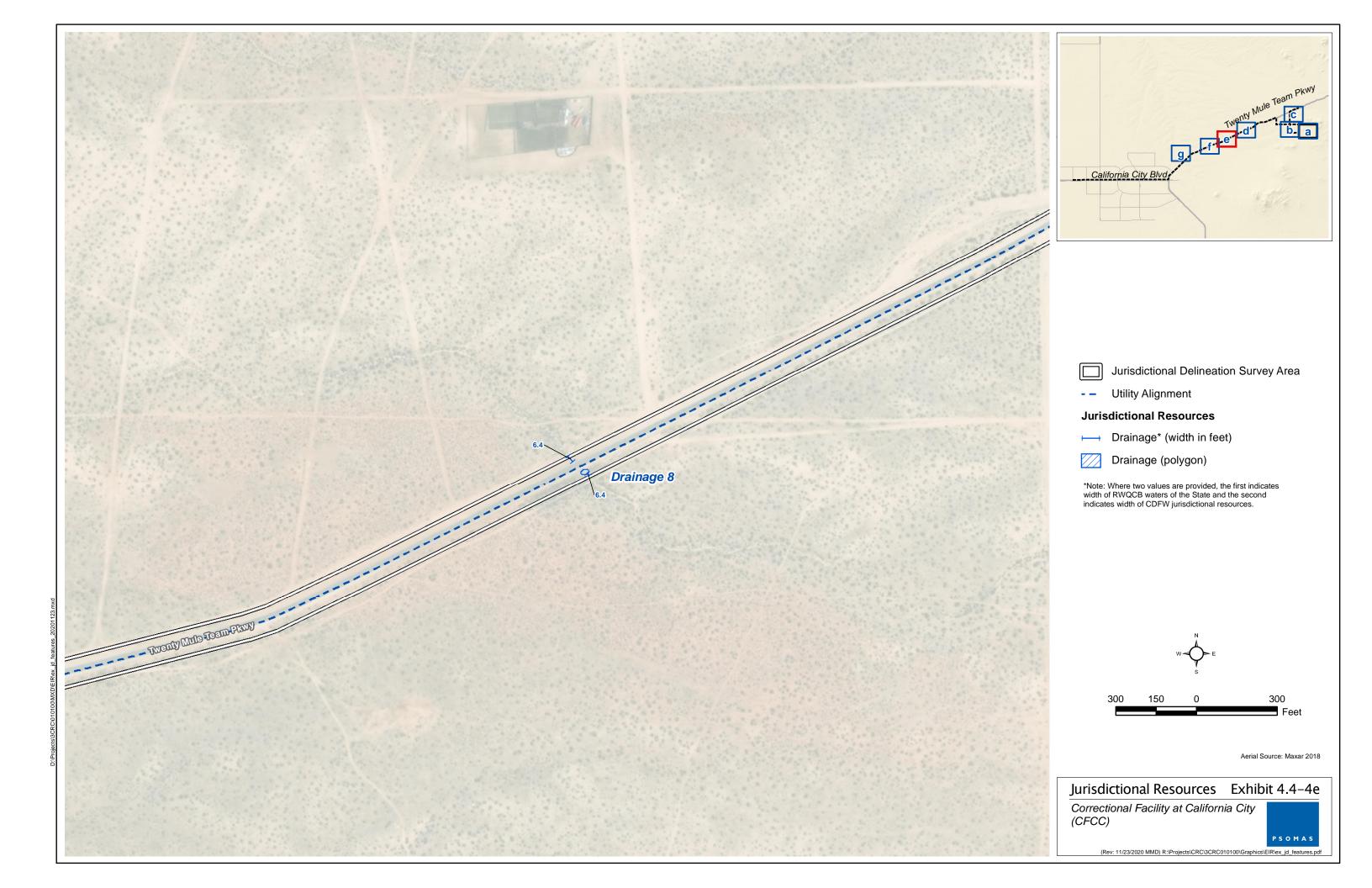
Exhibits 4.4-4a through g show the locations of these jurisdictional resources.

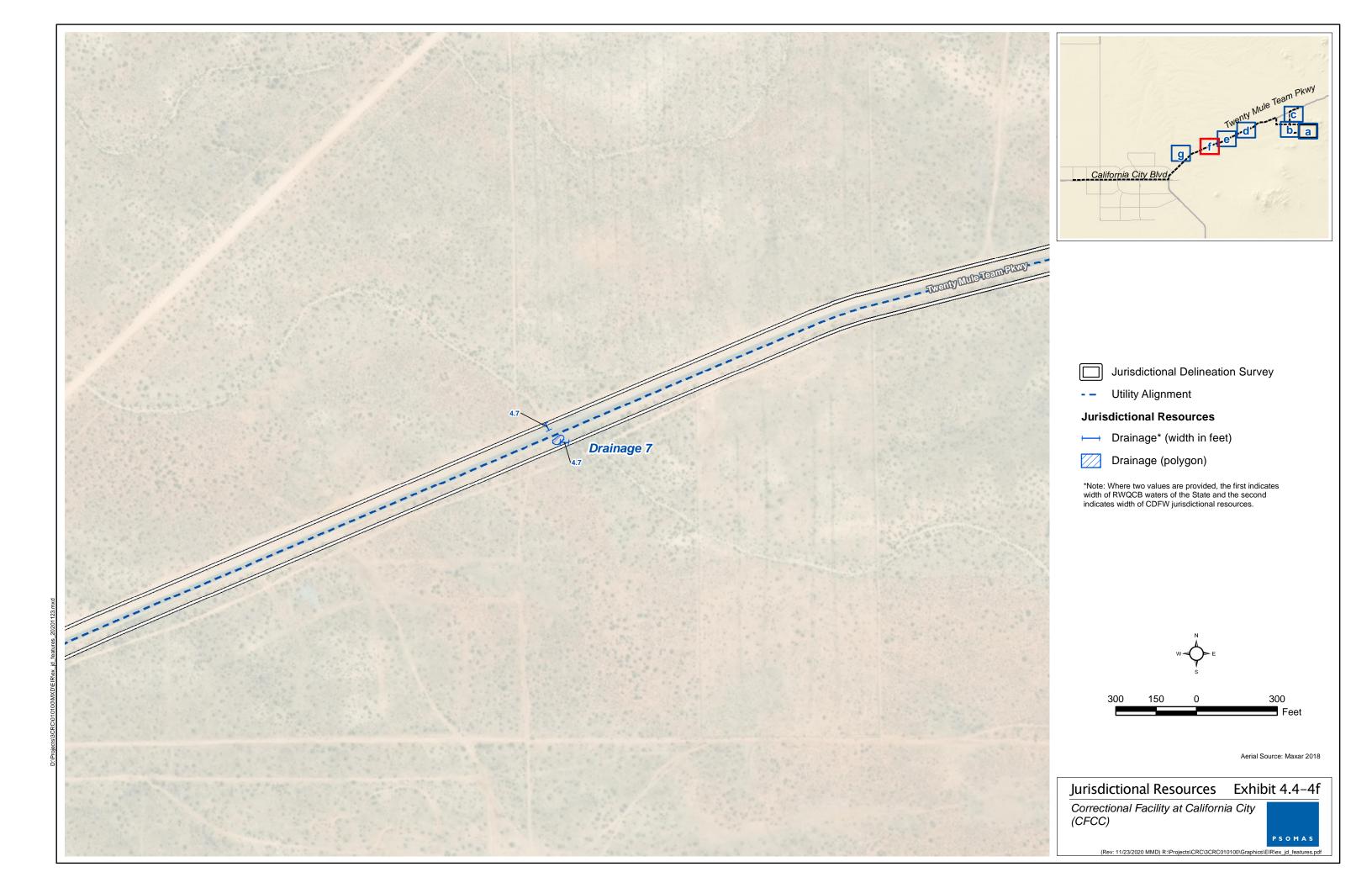


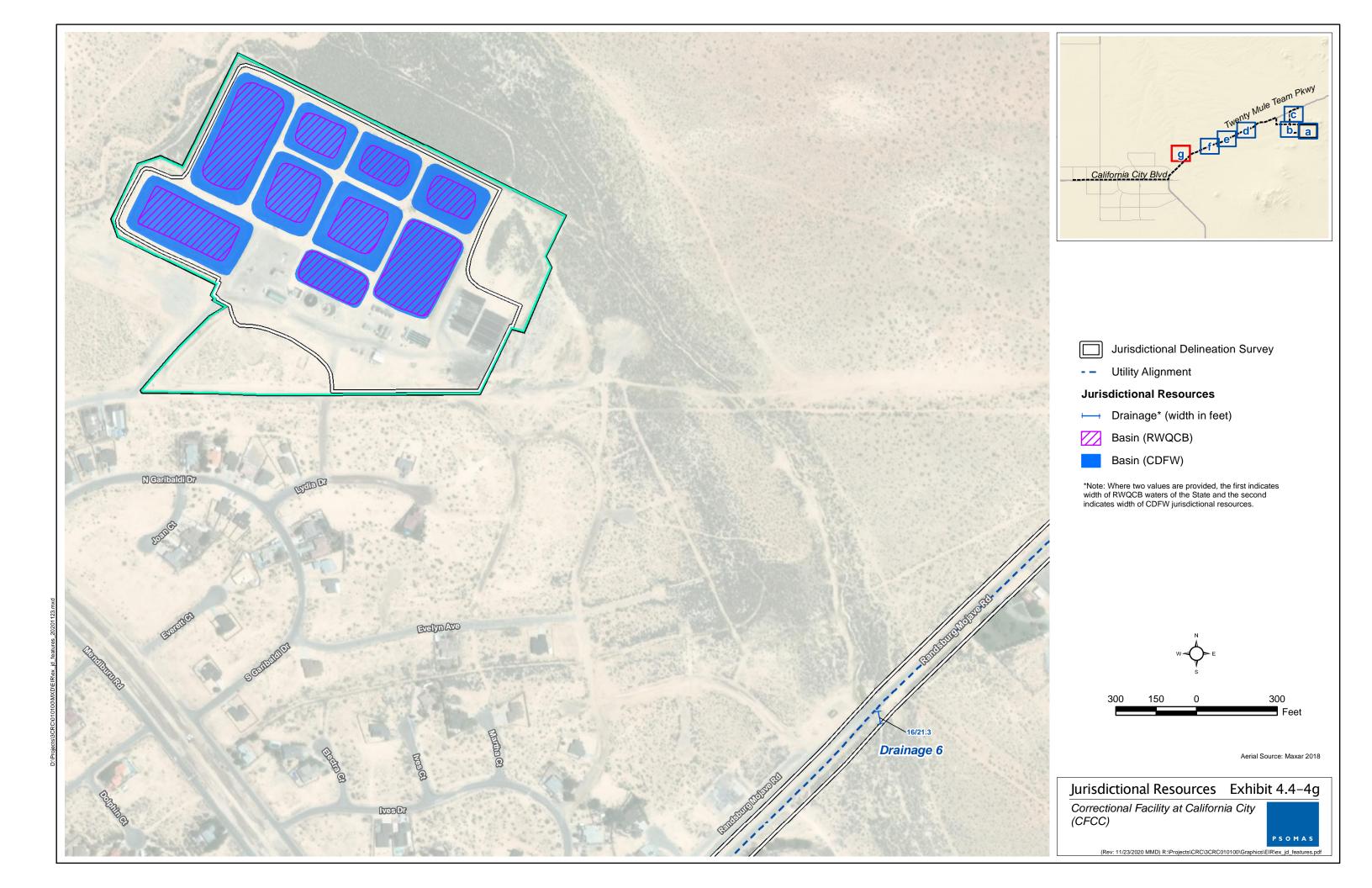












4.4.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Biological Resources if it would:

Threshold 4.4a: 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 the

CDFW or USFWS.

Threshold 4.4b: Have a substantial adverse effect on any riparian habitat or other sensitive

natural community identified in local or regional plans, policies, regulations,

or by the CDFW or USFWS.

Threshold 4.4c: Have a substantial adverse effect on state or federally protected wetlands

(including, but not limited to, marsh, vernal pool, coastal, etc.) through

direct removal, filling, hydrological interruption, or other means.

Threshold 4.4d: 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.

Threshold 4.4e: Conflict with any local policies or ordinances protecting biological

resources, such as a tree preservation policy or ordinance.

Threshold 4.4f: Conflict with the provisions of an adopted Habitat Conservation Plan,

Natural Community Conservation Plan, or other approved local, regional.

or State habitat conservation plan.

4.4.4 ENVIRONMENTAL IMPACT ANALYSIS

Construction of the Project would lead to the disturbance and removal of all existing vegetation on the Project site and within the excavation trenches along the utility alignment corridor. Improvements to expand the capacity of the WWTP would occur within the area shown as impacted. Because the design of the improvements has not yet been completed, this document assumes that undefined portions of the entire area would be impacted; however, it is expected that the improvements would disturb less than shown. Table 4.4-4 shows the vegetation types that would be impacted by the Project.

TABLE 4.4-4 VEGETATION TYPES AND OTHER AREAS IMPACTED BY THE PROPOSED PROJECT

	Project site		Utility Alignment		WWTP ^a		Total
Vegetation Types and Other Areas	Existing (Acres)	Impacted (Acres)	Existing (Acres)	Impacted (Acres)	Existing (Acres)	Impacted (Acres)	Impacted (Acres)
Creosote Bush–White Bursage Scrub	216.45	216.45	40.46	0.00	0.00	0.00	216.45
Disturbed Creosote Bush–White Bursage Scrub	0.00	0.00	4.10	0.00	0.00	0.00	0.00
Creosote Bush–White Bursage Scrub/Allscale Scrub	0.00	0.00	0.10	0.00	0.00	0.00	0.00
Rubber Rabbitbrush Scrub	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Allscale Scrub	0.00	0.00	0.91	0.00	0.00	0.00	0.00
Rubber Rabbitbrush–Allscale Scrub	0.00	0.00	0.00	0.00	4.82	4.82	4.82
Semi-natural Herbaceous Stand	0.00	0.00	0.25	0.00	1.24	1.24	1.24
Ornamental	0.00	0.00	5.17	0.17	0.00	0.00	0.17
Open Water	0.00	0.00	80.0	0.00	2.65	2.65	2.65
Developed/Ornamental	0.00	0.00	2.04	0.00	0.00	0.00	0.00
Developed	0.00	0.00	53.75	5.80	1.42	1.42	7.22
Disturbed	0.08	0.08	41.42	2.46	14.01	14.01	16.55
Total	216.53	216.53	148.67	8.43	24.14	24.14	248.88

G: Global; S: State; "-": not applicable.

As shown, the proposed Project would permanently impact all 216.45 acres of creosote bush—white bursage scrub on the Project site. This vegetation type is ranked as G5 S5, considered secure by the CDFW. Therefore, this impact is considered less than significant, and no mitigation would be required.

The Project would impact up to 4.82 acres of rubber rabbitbrush–allscale scrub at the WWTP. Following the Project, some of this vegetation may be allowed to regrow around the ponds, as it is currently; however, all vegetation is considered permanently impacted because some or all of it may be permanently impacted by the improvements. This vegetation type is ranked as G4/G5 and S4/S5, considered secure/apparently secure and uncommon but not rare by the CDFW. Therefore, this impact is considered less than significant, and no mitigation would be required.

Approximately 0.08 acre of disturbed land would also be permanently impacted on the Project site. The extension of utilities to the Project site would temporarily impact 0.17 acre of ornamental, 2.46 acres of disturbed land, and 5.80 acres of developed areas along the utility alignment. The WWTP would temporarily impact up to 1.24 acres of semi-natural herbaceous stand, 1.42 acres of developed areas, and undefined portions of 14.01 acres of disturbed land. Following the Project, it is expected that areas disturbed along the utility alignment and at the WWTP would return to some combination of developed, disturbed, semi-natural herbaceous stand, and ornamental. These vegetation types and other areas are considered of low biological value. Therefore, these impacts are considered less than significant, and no mitigation would be required.

^a Because the design of the improvements for the WWTP has not yet been completed, this document assumes that the entire area would be impacted; however, it is expected that the improvements would disturb less than shown.

Improvements at the WWTP would also temporarily impact up to 2.65 acres of open water. Open water is not a vegetation type so it has no threat ranking; however, it is considered a valuable land cover/habitat type. Following the Project, it is expected that the same or more open water would be present at the WWTP following the improvements. Open water is considered under the jurisdiction of the resource agencies (e.g., RWQCB) and will be discussed under checklist question (b).

Native and non-native vegetation provide valuable nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. The proposed Project would permanently impact approximately 216.45 acres of native vegetation types (creosote bush-white bursage scrub) and 0.08 acre of disturbed land on the Project site. It would also temporarily impact approximately 0.17 acre of ornamental and 2.46 acres of disturbed areas along existing roadways along the utility alignment. Removing or altering habitats on the Project site would likely result in the loss of small mammals, reptiles, amphibians, and other slow-moving wildlife that live in the Project's direct impact area. More mobile wildlife species that are now using the Project site would be forced to move into the adjacent open space, which would consequently increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. The loss of native and non-native vegetation that provides wildlife habitat is considered an adverse impact. However, the loss of native and non-native habitat on the Project site and utility alignment would impact a limited amount of potential habitat relative to the amount of available habitat for wildlife species in the region. Thus, this impact is not be expected to reduce populations of common wildlife species below self-sustaining levels in the Project region. Therefore, this impact would be considered adverse but less than significant, and no mitigation would be required.

The Project would impact up to 4.82 acres of native vegetation types (rubber rabbitbrush–allscale scrub) and 1.24 acres of semi-natural herbaceous stand, 2.65 acres of open water, and undefined portions of 14.01 acres of disturbed at the WWTP. Following the Project, the basins may be reconfigured, but it is expected that the same or greater basin area would be present. Therefore, the improvements are not expected to decrease the functions and values of the site for wildlife (e.g., open water for foraging). Therefore, this impact would be considered less than significant, and no mitigation would be required.

Several common bird species have the potential to nest in the vegetation or on the ground on the Project site and utility alignment. MM BIO-1 addresses the time frame in which construction could occur to avoid active nests and includes a requirement for pre-construction surveys and avoidance of active nests. Implementation of MM BIO-1 would prevent the adverse impact and ensure that construction impacts would not violate the provisions of the MBTA and *California Fish and Game Code*.

Threshold 4.4a:

Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special status plant and wildlife species found in the areas to be disturbed would be adversely affected by the Project. Potential impacts on special status plant and wildlife species include:

Mojave Spineflower - Given the status of the Mojave spineflower (CRPR 4.2), the presence of other populations in the region, and the limited number observed on the Project site, impacts to the Mojave spineflower would be adverse but less than significant. Therefore, no mitigation would be required.

Other Special Status Plant Species - The following species have limited potential to occur at the WWTP based on the presence of marginally suitable habitat: alkali mariposa lily, white pygmypoppy, Mojave spineflower, Mojave tarplant, recurved larkspur, Barstow woolly sunflower, Death Valley sandmat, golden goodmania, solitary blazing star, creamy blazing star, crowned muilla, and Charlotte's phacelia. Focused surveys would be required prior to construction to determine the presence or absence of these species at the WWTP. If any special status plant species are found, and the size and status of the population is substantial based on the regional population size of the species, the Project's impact on that species could be significant. Implementation of MM BIO-2 would reduce this potentially significant impact to a less than significant level. This measure describes the procedure to mitigate for each species that may be found. Desert Native Plants - Desert native plants protected by the CDNPA are present on the site and include nine California barrel cactus (Ferocactus cylindraceus), two cottontop cactus (Echinocactus polycephalus), and eight silver cholla. Removal of the 19 cactus individual plants during site clearing activities would require a permit from the Kern County Agricultural Commissioner (MM BIO-3). Implementation of MM BIO-3 would reduce potential impacts to less than significant and ensure compliance with the CDNPA.

Crotch Bumble Bee – The Crotch bumble bee has a limited potential to occur on the Project site, adjacent to the utility alignment, and at the WWTP because suitable host plant species are present in these areas. Approximately 216.45 acres of suitable habitat (i.e., creosote bush—white bursage scrub) for this species would be impacted by on the Project site. An additional 4.82 acres of suitable habitat (i.e., rabbitbrush—allscale scrub) would be impacted at the WWTP. This species is a Candidate for State listing as Endangered. If present, any impact on this species, either through direct mortality or through loss of habitat, would be considered significant. Implementation of MMs BIO-4 through BIO-6 would reduce this impact to a less than significant level by requiring compensatory mitigation for loss of habitat and State permitting for take of this species.

Desert Tortoise - The desert tortoise may occur on the Project site and along the utility alignment. It is not expected to occur at the WWTP due to the presence of exclusionary fencing. Approximately 216.45 acres of suitable habitat (i.e., creosote bush—white bursage scrub) for this species would be impacted by the Project. Activities along the utility alignment would not impact any suitable habitat but may affect individuals crossing or traversing the alignment. During construction, desert tortoise could fall into trenches or be hit by construction vehicles. The species can also be indirectly impacted by increased predation by common ravens attracted to the construction area by improper disposal of trash or standing water from dust control. Because this species is federally and State listed as Threatened, any impact on this species, either through direct mortality or through loss of habitat, would be considered significant. Implementation of MMs BIO-4 through BIO-6 would reduce this impact to a less than significant level by requiring compensatory mitigation for loss of habitat, federal and State permitting for take of this species, and measures to avoid and minimize the potential for direct mortality of individuals.

Raptors - Ten special status raptor species were observed or have potential to forage on the Project site, along the utility alignment, and at the WWTP: California condor (*Gymnogyps californianus*), golden eagle, osprey, Cooper's hawk, Swainson's hawk, bald eagle, prairie falcon, American peregrine falcon (*Falco peregrinus anatum*), short-eared owl (*Asio flammeus*), and burrowing owl. Suitable foraging habitat for these species would be permanently impacted within the Project site and temporarily impacted during construction along the utility alignment and at the WWTP. Impacts to habitat within the Project site would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of foraging habitat available in the region. Impacts to foraging activities along the utility alignment would be limited because construction would occur in segments and raptors could forage around the small segment of active construction, still using the substantial amount of habitat in the surrounding areas. Temporary disturbance to foraging habitat at the WWTP would impact a

limited amount of habitat relative to the amount of foraging habitat available in the surrounding area; the area would be available for foraging after the construction is complete. No mitigation is required.

Swainson's Hawk, Osprey, and Cooper's Hawk – The Swainson's hawk and osprey have potential to nest in the electrical utility poles along the utility alignment and adjacent to the WWTP. One species, Cooper's hawk, has limited potential to nest in the ornamental trees adjacent to the utility alignment. The Project would not directly impact suitable nesting habitat for these species, but the species could be disturbed by construction adjacent to active nests. Swainson's hawk is State listed as Threatened; therefore, the loss of active nests would be considered potentially significant. Additionally, nests of these species are protected by the MBTA and California Fish and Game Code. Implementation of MM BIO-1 would reduce this impact to a less than significant level.

Burrowing Owl - As discussed above, although nesting burrowing owls were not observed on the Project site, one burrowing owl was observed foraging and sign of winter occupation was observed. Thus, the burrowing owl has potential to nest on the Project site, as well as along the utility alignment and at the WWTP. The Project would directly impact suitable nesting habitat for burrowing owl. MMs BIO-1 and BIO-7 require a pre-construction survey for the burrowing owl and the implementation of CDFW-approved burrow closing procedures and protective buffers around active burrows. Implementation of MMs BIO-1 and BIO-7 would reduce this impact to a less than significant level.

Loggerhead Shrike, LeConte's Thrasher, and Brewer's Sparrow - Three additional special status bird species, loggerhead shrike, LeConte's thrasher, and Brewer's sparrow, have potential to forage and nest on the Project site, adjacent to the utility alignment, and at the WWTP. The Project would impact suitable foraging and nesting habitat for these species. This impact would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. However, active nests are protected by the MBTA and California Fish and Game Code and could be affected by adjacent construction activities. Implementation of MM BIO-1 would ensure that measures are taken to avoid and minimize impacts on active nests.

Western Snowy Plover - Western snowy plover has potential to occur for foraging and limited potential to nest at the basins at the WWTP; suitable habitat is not present on the Project site or along the utility alignment. The Project would temporarily impact a limited amount of suitable foraging and marginally suitable nesting habitat for the species. Following the Project, it is expected that the same or more basin area would be present at the WWTP following the improvements. This impact would be considered less than significant because it would be a temporary loss of a limited amount of marginally suitable habitat. However, active nests are protected by the MBTA and California Fish and Game Code and could be affected by adjacent construction activities. Implementation of MM BIO-1 would ensure that measures are taken to avoid and minimize impacts on active nests.

Other Bird Species - Two other special status bird species have potential to occur for foraging but would not be expected to nest on the Project site, utility alignment, or the WWTP: olive-sided flycatcher and mountain plover. While olive-sided flycatcher was observed during surveys, no suitable habitat is present on the Project site or utility alignment. Therefore, it is expected that this species would occur only as a migrant. The mountain plover occurs in the Project region only during winter. Additionally, it most commonly winters in agricultural fields and disturbed areas. However, it could forage on the Project site, adjacent to the utility alignment, and at the WWTP. The Project would impact suitable foraging habitat for these species (the olive-sided flycatcher would only forage as it moves through during migration). This impact would be considered

adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. No mitigation is required.

Bats - Four special status bat species have potential to forage on the Project site, along the utility alignment, and at the WWTP: pallid bat, Townsend's big-eared bat, spotted bat, and western mastiff bat. The Project would impact suitable foraging habitat for these species. This impact would be considered adverse but less than significant because the Project would impact a limited amount of foraging habitat relative to the amount of foraging habitat available for these species in the region. Only pallid bat has potential to roost on the Project site in the rock outcrops. Pallid bat and Townsend's big-eared bat have potential to roost in the buildings and man-made structures at the WWTP. The Project would impact a small amount of potential roosting habitat for pallid bat on the Project site. This impact would also be considered adverse but less than significant because of the amount of roosting habitat available in the hills and rock outcrops immediately adjacent to the Project site. The Project is not expected to impact existing structures at the WWTP. Therefore, no mitigation is required.

Mohave Ground Squirrel - The Mohave ground squirrel may occur on the Project site, adjacent to the utility alignment, and at the WWTP. This species was not directly observed during camera surveys; however, its presence is assumed in suitable habitat throughout the Project site, adjacent to the utility alignment, and at the WWTP because protocol surveys were not conducted to determine presence or absence and because the species is known from multiple locations in the vicinity. The Project would impact 216.45 acres of suitable habitat (i.e., creosote bush—white bursage scrub) for this species on the Project site. The Project would impact up to 4.82 acres of suitable habitat at the WWTP (i.e., rabbitbrush—allscale scrub). Additionally, vibration from construction could cause the collapse of burrows in the adjacent habitat, and Mohave ground squirrels could be entombed in their burrows. Individuals could also potentially move through the construction area and could fall into trenches or be hit by construction vehicles. Project impacts on this species, through either direct mortality or through loss of habitat, would be considered significant. Implementation of MMs BIO-4 through BIO-6 would minimize the potential for direct mortality of individuals and reduce this impact to a less than significant level.

Tulare grasshopper mouse - An additional special status small mammal, Tulare grasshopper mouse, may occur on the Project site, adjacent to the utility alignment, and at the WWTP. The Project would impact suitable habitat for this species and it could also be entombed in burrows due to vibration from construction activities. These impacts would be considered adverse, but less than significant, because the Project would impact a limited amount of habitat/individuals relative to the amount in the region. No mitigation is required.

Desert Kit Fox and American Badger - Desert kit fox and American badger are expected to occur on the Project site, adjacent to the utility alignment, and at the WWTP. The Project would impact suitable habitat for these species. The loss of habitat would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of available for these species in the region. However, the desert kit fox is protected by *California Fish and Game Code*, which prohibits take of individuals of this species. While American badgers are not afforded the same protection under *California Fish and Game Code*, the measures to protect active desert kit fox dens can also be applied to protect active American badger dens; thus, this species is typically included in measures to protect active dens. MMs BIO-6 and BIO-8 would require measures that would avoid and minimize impacts on desert kit foxes and American badgers and active dens.

Indirect Impacts

During construction, indirect impacts related to changes in water quality in drainages near construction areas could potentially affect plant and wildlife species using habitat adjacent to the construction site. Additionally, standing water resulting from dust control could attract ravens, which are predators of the desert tortoise, to the Project site and utility alignment. As part of RR HYD-1 in Section 4.9, Hydrology and Water Quality, of this EIR, MM BIO-9 includes implementation of best management practices to reduce pollutants in stormwater runoff during construction. This would reduce indirect impacts to biological resources associated with changes in water quality to a less than significant level.

During construction, the northern portion of the Project site may require blasting to successfully bring the Project site to the appropriate grade. The need for blasting will be confirmed through additional geotechnical investigation (RR GEO-2 in Section 4.6, Geology and Soils, of this EIR) during project design. The noise associated with blasting would likely result in wildlife startling and temporarily leaving the adjacent areas. Most wildlife are expected to return to habitat areas adjacent to the Project site after blasting has been completed. However, some wildlife may abandon a nest or den following the blasting effort. Furthermore, the vibration associated with blasting could result in the collapse of offsite burrows occupied by wildlife unable to re-excavate and escape their burrows; affected species could include desert tortoise. Mohave ground squirrel, desert kit fox, American badger, and burrowing owl, as well as other common burrowing wildlife. Noise effects are expected to extend approximately 500 feet from the blasting, while vibration effects are expected to extend approximately 200 feet from the blasting area. This would subject approximately 23.71 additional acres of habitat areas (23.67 acres of creosote bush scrub-white bursage scrub and 0.04 acre of disturbed) to indirect effects due to vibration. While habitat would remain in these areas, all burrows in this area would need to be excavated prior to the blasting effort to ensure special status wildlife are not inadvertently killed by burrow collapse. Indirect effects on special status burrowing wildlife (desert tortoise, Mohave ground squirrel, desert kit fox, American badger, and burrowing owl) would be considered significant. Implementation of MMs BIO-1 and BIO-4 through BIO-8 would reduce this impact to a less than significant level. Impacts on common burrowing wildlife would be considered adverse but less than significant since the loss of burrows in the indirect impact area would not be expected to substantially reduce the regional population of these species.

During active construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species. Construction noise could deter wildlife from using habitat adjacent to construction. This impact would be considered adverse but less than significant because a substantial amount of similar habitat is present in the vicinity where the animals may disperse. Therefore, no mitigation would be required.

Following construction of the Project, the ambient noise levels adjacent to the Project site are expected to incrementally increase. Noise levels are not expected to increase following construction along the utility alignment or at the WWTP. Wildlife species stressed by noise may disperse from the habitat immediately adjacent to the Project site. This impact would be considered adverse but less than significant because it is expected to impact a limited area and a substantial amount of similar habitat remains in the adjacent areas where the animals may disperse. Therefore, no mitigation would be required.

Night lighting may impact the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to night lighting. Of greatest concern is the effect on small, ground-dwelling animals that use the darkness to hide from predators and/or owls, which are specialized night foragers. Due to the need for security at the Project, it would include substantial night lighting of the area immediately adjacent to the Project site. These additional light sources may negatively

affect wildlife in the surrounding open space. Implementation of MM BIO-10, which requires that spillover of night light be limited to the extent practicable, would reduce this impact to a less than significant level. Night lighting is not expected to increase along the utility alignment or at the WWTP.

Landscaping that includes installation of non-native, invasive plant species (e.g., species listed in the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) can be detrimental to surrounding native habitat. Invasive species have the potential to spread into the surrounding natural open space and displace native species, hybridize with native species (thereby impacting the genetic integrity of the native species), alter biological communities, or alter ecosystem processes (e.g., tamarisk [Tamarix sp.] affects hydrology). This could degrade the quality of the adjacent vegetation, including vegetation communities that provide suitable habitat for Threatened or Endangered species. If landscaping is included as part of the proposed Project, this could be a potentially significant impact on adjacent habitat. Implementation of MM BIO-11 would prohibit the use of non-native, invasive plant species in landscaping associated with the proposed Project. This measure would reduce potential impacts to a less than significant level.

Construction activities create disturbance, which in turn provides a place for non-native weedy species to spread. Additionally, construction equipment can introduce non-native weed seeds to the area if equipment is not properly cleaned. Weeds from the construction areas may then spread to adjacent habitat areas, which would degrade habitat quality for native species. In addition, non-native weeds can also increase the potential for large fires to spread. MM BIO-12 would require use of Best Management Practices associated with prevention of the spread of weed seeds to reduce this potential impact to a less than significant level.

During construction, the increase in human activity in the Project site, along the utility alignment, and at the WWTP could potentially disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species adjacent to construction areas. This impact would be considered adverse but less than significant because a substantial amount of similar habitat is present in the vicinity where animals may disperse. Therefore, no mitigation is required.

Following construction of the Project, human activity is expected to be limited to the areas within the Project site (i.e., within the fenced limits of the constructed facility). Similarly, human activity along the utility alignment and at the WWTP is not expected to differ from existing conditions following construction. Therefore, no mitigation would be required.

Threshold 4.4b: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or

habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Threshold 4.4c: Would the project have a substantial adverse effect on state or

federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological

interruption, or other means?

The discussion below summarizes the findings of the Jurisdictional Delineation that was prepared for the Project and provided in Appendix C-3.

Multiple drainage features were mapped on the Project site and along the utility alignment; multiple basins were mapped at the WWTP. These features are potentially under the regulatory authority of the RWQCB and/or the CDFW; the regulatory agencies make the final determination on their jurisdictional extent. Approximately 10.659 acres of waters of the State potentially under the jurisdiction of the RWQCB occur in the study area (2.989 acres on the Project site, 0.022 acre

along the utility alignment, and 7.648 acres at the WWTP). Approximately 16.745 acres of waters potentially under the jurisdiction of the CDFW⁵ occur in the study area (2.989 acres on the Project site, 0.414 acre along the utility alignment, and 13.342 acres at the WWTP). The jurisdictional resources in the study area are summarized in Table 4.4-5.

TABLE 4.4-5
JURISDICTIONAL RESOURCES IN THE STUDY AREA

	Project Site		Utility Alignment		Wastewater Treatment Plant		Total Impacted
Jurisdiction	Existing	Impacted	Existing	Impacted	Existing	Impacted	
Total USACE waters of the United States							
Acres	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Linear Feet	0	0	0	0	0	0	0
Total RWQCB waters of the State ^a							
Acres	2.989	2.989	0.022	0.000	7.648	7.648	10.637
Linear Feet	31,908	31,908	307	0	n/a	n/a	31,908
Total Potential CDFW Jurisdictional Resources ^b							
Acres	2.989	2.989	0.414	0.003	13.342	13.342	16.334
Linear Feet	31,908	31,908	307	34	n/a	n/a	31,944

USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; n/a: not applicable.

It is anticipated that 31,904 linear feet of jurisdictional resources on the Project site would be impacted by construction activities, as well as 34 linear feet of identified jurisdictional resources within a 5-foot wide trench along the utility alignment. Based on the results of the data analysis, it was determined that the Project impacts on jurisdictional resources on the Project site and along the utility corridor include:

- RWQCB Jurisdiction: 2.989 acres (2.989 acres on the Project site; 0.000 acre along the utility alignment).
- CDFW Jurisdiction: 2.992 acres (2.989 acres on the Project site; 0.003 acre along the utility alignment).

Improvements to expand the capacity of the WWTP would occur within the area shown as impacted. Because the design of the improvements has not yet been completed, this document assumes that the entire area would be impacted; however, it is expected that the improvements would disturb less than shown. If CDFW were to extend their jurisdiction to cover the operating WWTP ponds that would be upgraded/modified as part of the proposed Project, potential impacts on jurisdictional water resources at the WWTP could include up to:

RWQCB Jurisdiction: 7.648 acres.

a RWQCB jurisdictional boundaries are defined as those determined for the USACE under waters of the United States; however, the RWQCB also takes jurisdiction over isolated waters.

No specific regulatory guidance exists with respect to man-made basins; CDFW jurisdiction is determined on a case-by-case basis through a discussion with the regulator based on site conditions. These basins may or may not be considered jurisdictional.

⁵ No specific regulatory guidance exists with respect to man-made basins; CDFW jurisdiction is determined on a case-by-case basis through a discussion with the regulator based on site conditions. These basins may or may not be considered jurisdictional.

CDFW Jurisdiction: 13.342 acres.

Impacts are considered significant according to the significance criteria and would require regulatory authorization from the applicable agencies. Thus, the following permit/agreement are required from resource agencies prior to initiation of Project activities that involve impacts to jurisdictional waters:

- RWQCB Report of Waste Discharge (RWD) for issuance of Waste Discharge Requirements under the State's Porter-Cologne Water Quality Control Act
- CDFW Section 1602 Notification of Lake or Streambed Alteration for a Lake or Streambed Alteration (LSA) Agreement between CDFW and the Project Applicant/Developer

As part of the resource agency consultations and regulatory permitting process, mitigation for the loss of jurisdictional resources shall be defined and may include one or more of the following: (1) payment to a mitigation bank or regional riparian enhancement program (e.g., invasive plant or wildlife species removal) and/or (2) restoration of riparian habitat either on site or off site at a ratio of no less than 1:1. Procurement of these permit/agreement and compliance with the conditions of the permit/agreement (MM BIO-13) would reduce potentially significant impacts to wetlands and riparian communities to less than significant levels.

No special status vegetation types (i.e., CDFW sensitive communities) occur in the study area. Therefore, no impact on special status vegetation would be impacted by the Project.

Threshold 4.4d:

Would the project 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?

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of large, open space areas that is caused by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because this prohibits the infusion of new individuals and genetic information into the local population. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to replenish and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, reducing the risk that catastrophic events (e.g., fire, disease) will result in population or local species extinction; and (3) serving as travel routes to facilitate movement of individual animals within their home ranges in search of food, water, mates, and other necessary resources.

In a large open space area where there are few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors may not yet exist. Given an open space area that is large enough to both maintain viable populations of species and also to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these "local" routes while searching for food, water, shelter, and mates and will not need to cross into other large open space areas. Depending on expanse, location, vegetative composition and food availability, some of these movement areas (e.g., large drainages and canyons) are used more extensively as source areas for food, water, and cover, particularly by small- and medium-sized animals. Once open space areas become constrained and/or fragmented, often as a result of urban development or construction of physical obstacles (e.g., roads and highways), the

remaining landscape features or travel routes can connect the larger open space areas. These connecting travel routes can serve as wildlife corridors, as long as they provide adequate space, cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Wildlife movement is generally unconstrained surrounding the study area since it is almost entirely surrounded by undeveloped open space. The only barrier to wildlife movement from the Project site is the existing CCCC to the west and roadways carrying a low amount of traffic (e.g., Twenty Mule Team Parkway). The WWTP is generally surrounded on the west, north and east by unconstrained open space with drainages surrounding the WWTP that provide for wildlife movement. The only barrier to movement in this area is the WWTP facility fence and the adjacent developed area of California City that includes low density existing residential neighborhoods to the south of the WWTP. The western end of the utility alignment is also located in the developed area of California City. Development in this area is low-density; many wildlife (e.g., coyotes, foxes) can move through this type of development to surrounding areas of open space.

The Project site generally occurs in an area of undeveloped open space where wildlife movement is not presently confined to a corridor. The proposed Project would remove approximately 216.45 acres of live-in habitat and open space that wildlife currently moves through; however, it would not create a barrier to movement because wildlife would be able to move around the Project site during construction and operation of the Project using adjacent areas of open space. Therefore, the impact on wildlife movement would be considered less than significant; and no mitigation would be required.

Construction of utilities would occur along existing roadways. Construction activities would be temporary, and then the disturbed areas would be returned to existing conditions. Construction of the utilities would not introduce any new barriers to wildlife movement; therefore, impacts on wildlife movement would be less than significant, and no mitigation would be required. During construction, wildlife would not be able to move through the area of active construction, but they could move around the small segment of active construction using surrounding areas of open space. Therefore, temporary impacts on wildlife movement would be considered less than significant; and no mitigation would be required. Also, once completed, these access road and infrastructure upgrades would be at-grade or underground and would then allow wildlife movement, as existing. Temporary impacts would be less than significant during construction and no mitigation is required.

The WWTP generally occurs in an area of mostly undeveloped open space where wildlife movement likely follows the drainages around the existing facility. The Project would temporarily impact up to approximately 24.14 acres that mobile wildlife could move through (i.e., those that could move over or through the existing fence); however, it would not create a barrier to movement because wildlife would be able to continue moving around the WWTP during construction and operation of the Project, as currently occurs using adjacent areas of open space. Therefore, the impact on wildlife movement would be considered less than significant, and no mitigation would be required.

Threshold 4.4e: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Project site and WWTP do not support trees protected by the City's tree ordinance and no trees would be removed by the Project. In addition, the Project does not include the improvement of adjacent roads or the planting of street trees. Thus, the project would not conflict with the City's

tree ordinance, as contained in Title 7, Chapter 8 of the City's Municipal Code. No impact would occur.

Construction along the utility alignment would be located within public rights-of-way, where for the most part, no trees are present. There are a few trees located along existing roadways in the western portion of the utility alignment (e.g., California City Boulevard). It is not yet known whether the alignment would affect ornamental trees along the roadway; however, the City's tree ordinance allows for trees to be removed, pruned or trimmed for purposes of public improvements such as utility improvements (Title 7, Chapter 8, 103). No street trees are proposed by the Project. Thus, the project would not conflict with the City's tree ordinance and no impact would occur.

Threshold 4.4f: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

The Project site is located within the boundaries of the California Desert Conservation Area (CDCA) Plan and the West Mojave Plan, which is an amendment to the CDCA Plan. The West Mojave Plan was developed by 28 participating agencies and jurisdictions including the USFWS, the Bureau of Land Management (BLM), the CDFW, the California Department of Transportation (Caltrans), 4 counties, 11 cities, the Indian Wells Valley Water District, and 5 military installations. The Plan has been approved and adopted by applicable federal agencies. However, State and local agencies did not adopt the habitat conservation plan proposed in the West Mojave Plan to cover their jurisdictions, and therefore, the adopted plan only applies to federal public lands.

The Project site is non-federal land and is, therefore, not subject to West Mojave Plan requirements. However, the parcel immediately north of the Project site is BLM land subject to the West Mojave Plan. The Project would not interfere with any conservation areas designed by the West Mojave Plan, including Habitat Conservation Areas, Special Review Areas, critical habitat on Military Lands, existing Area of Critical Environmental Concern, or BLM Wilderness Area. A 50-foot wide roadway right-of-way easement would serve as a buffer that would be provided along the northern boundary of the site and the Project does not propose any improvements on BLM land. Thus, the Project is consistent with the goals and strategies of this plan. No conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan would occur with the Project; no impact would occur.

4.4.5 CUMULATIVE IMPACTS

The cumulative study area for biological resources includes the wider Western Mojave Desert area because the plant and animal species on the Project site is representative of the species present in this area. The Project would disturb biological resources, including special-status plant and animal species and jurisdictional resources on the Project site, and potentially along the utility alignment, and at the WWTP. Therefore, development of the Project would cumulatively contribute to a loss of biological resources, when considered with future growth and development in the Western Mojave Desert. Project implementation of MMs BIO-1 through BIO-13 would reduce the Project's significant adverse impacts to less than significant levels. Other development projects in the Western Mojave Desert would also have to implement mitigation measures to avoid or reduce their impacts on sensitive and special-status plant and animal species and wetlands/riparian communities, as required by resource agencies. Therefore, compliance by individual developments with existing regulations and implementation of project-specific mitigation measures would reduce cumulatively significant impacts on regional biological resources.

The Project would have less than significant impacts related to wildlife movement; the City's tree ordinance; and adopted habitat conservation plans. Thus, it would not result in cumulatively considerable impacts related to these issues.

4.4.6 MITIGATION MEASURES

MM BIO-1

Nesting Birds/Raptors. To avoid impacts on active nests for common and special status birds and raptors, CoreCivic or its designee shall schedule vegetation clearing and blasting during the non-breeding season (i.e., September 16 to January 31) to the extent feasible. If Project timing requires that vegetation clearing and/or blasting occur between February 1 and September 15, CoreCivic or its designee shall retain a qualified Biologist to conduct a pre-construction survey for nesting birds and raptors. The pre-construction survey shall be conducted by a qualified Biologist within three days prior to vegetation clearing. The pre-construction nesting bird survey area shall include the Project impact area (i.e., disturbance footprint) plus a 250-foot buffer to search for nesting birds and a 500-foot buffer to search for nesting raptors. If blasting is necessary, the pre-construction nesting bird survey shall be expanded to include 500 feet from the blasting area. If no active nests are found, no further mitigation would be required.

If an active nest is located in the pre-construction nesting bird survey area, the Biologist shall delineate an appropriate buffer to protect the nest based on the sensitivity of the species. A protective buffer of 500 feet shall be used to protect nesting raptors. If appropriate, a smaller buffer may be considered based on site topography, existing disturbance, sensitivity of the individuals (established by observing the individuals at the nest), and the type of construction activity. No construction activities shall be allowed in the designated buffer until the Biologist determines that nesting activity has ended. Construction may proceed within the buffer once the Biologist determines that nesting activity has ceased (i.e., fledglings have left the nest or the nest has failed). The designated buffer will be clearly marked in the field and will be mapped as Environmentally Sensitive Areas (ESAs) on construction plans. The Worker Environmental Awareness Program (WEAP) training shall include information on active nests and protective buffers.

Prior to the initiation of construction activities, an email summary of the results shall be submitted to the City with a map of any active nests found and their designated buffers. Construction shall be allowed to proceed if standard buffer distances are employed for any active nests. The Biologist shall then prepare a formal Letter Report describing methods used, results of the survey, recommended buffers, and/or justification for buffer reductions. The Letter Report shall be submitted to the City within one week of completion of the survey. If an active nest is observed during the survey, the Letter Report shall include a map showing the designated protective buffer.

MM BIO-2

Special Status Plant Species. Prior to construction activities, CoreCivic shall retain a qualified Biologist to conduct focused surveys for special status plant species at the WWTP. The survey will include the following species: alkali mariposa lily, white pygmy-poppy, Mojave spineflower, Mojave tarplant, recurved larkspur, Barstow woolly sunflower, Death Valley sandmat, golden goodmania, solitary blazing star, creamy blazing star, crowned muilla, and Charlotte's phacelia. The survey shall be performed during the target species' peak blooming period in accordance with the most current protocols approved by the CDFW and the CNPS. If special status plant species are present in the impact area, the qualified Biologist

will evaluate the significance with respect to the number of individuals impacted and the status of the species. To the greatest extent practicable, efforts shall be made to avoid any special status plant species population that is observed.

If avoidance is not feasible, the following measures shall be followed:

CRPR 1B and 2B Plants. If plants with a California Rare Plant Rank (CRPR) of 1B or 2B are observed in the impact area and cannot be avoided, the determination of significance will be based on the size of the impacted population relative to the regional population size. The regional population size will be determined based on the current total population sizes (excluding occurrences considered extirpated) of California Natural Diversity Database (CNDDB) and Consortium of California Herbaria (CCH) records from the U.S. Geological Survey (USGS) Boron, Boron NW, California City North, California City South, Cantil, Galileo Hill, Johannesburg, Mojave NE, North Edwards, Saltdale SE, and Sanborn 7.5minute quadrangles. If the impacted population of CRPR 1B or 2B species represents less than five percent of the regional population, the impact will be considered less than significant and no mitigation will be required. If the impacted population of CRPR 1B or 2B species represents five percent or more of the regional population, compensatory mitigation shall be required. Mitigation ratios (i.e., the amount of mitigation required compared to the amount of impact) shall be no less than 1:1, replacing impacted resources with resources of equivalent or higher quality habitat value. CoreCivic shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Mitigation Plan for approval by California City. The mitigation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation, maintenance plan/guidelines, (4) implementation schedule. (5) (6) monitoring plan, (7) long-term preservation. CoreCivic shall implement the Plan as approved.

CRPR 3 and 4 Plants. If plants with a CRPR of 3 or 4 are observed in the impact area and cannot be avoided, the determination of significance will be based on the size of the impacted population relative to the regional population size. The regional population size will be determined based on the current total population sizes (excluding occurrences considered extirpated) of CNDDB and CCH records from the USGS Boron, Boron NW, California City North, California City South, Cantil, Galileo Hill, Johannesburg, Mojave NE, North Edwards, Saltdale SE, and Sanborn 7.5minute quadrangles. If the impacted population of CRPR 3 or 4 species represents less than 20 percent of the regional population, the impact will be considered less than significant and no mitigation will be required If the impacted population of CRPR 3 or 4 species represents 20 percent or more of the regional population, compensatory mitigation shall be required. Mitigation ratios (i.e., the amount of mitigation required compared to the amount of impact) shall be no less than 1:1, replacing impacted resources with resources of equivalent or higher quality habitat value. CoreCivic shall retain a qualified Biologist to prepare a detailed Special Status Plant Species Mitigation Plan for approval by California City. The mitigation plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plan, (2) mitigation site selection criteria, (3) site preparation and planting implementation,

- (4) implementation schedule, (5) maintenance plan/guidelines,(6) monitoring plan, and (7) long-term preservation. CoreCivic shall implement the Plan as approved.
- MM BIO-3 California Desert Native Plant Harvesting Permits. Prior to the initiation of construction, the CoreCivic shall obtain the necessary permits, tags, and/or seals, and shall pay the appropriate fees for removal of any individuals of a species protected by the California Desert Native Plant Protection Act. This includes nine California barrel cactus, two cottontop cactus, and eight silver cholla.
- MM BIO-4

 Take Permits. Prior to the issuance of grading or building permits, CoreCivic shall provide a Section 10 Incidental Take Permit from the U.S. Fish and Wildlife Service (USFWS) for desert tortoise and a Section 2081 Incidental Take Permit from the CDFW for desert tortoise and Mohave ground squirrel. Compensatory mitigation for impacts on desert tortoise and Mohave ground squirrel are described in MM BIO-5. If Crotch bumble bee, a State Candidate species, is listed as State Endangered, the Section 2081 Incidental Take Permit shall also include this species.
- MM BIO-5 Compensatory Mitigation. CoreCivic or its designee shall provide compensatory mitigation for directly impacting 216.45 acres of habitat for desert tortoise and 221.27 acres of habitat for Mohave ground squirrel. If Crotch bumble bee, a State Candidate species, is listed as State Endangered, this mitigation shall also compensate for impacting 221.27 acres of habitat of this species. The goal of this mitigation is to ensure no net loss of habitat following implementation of the Project. Mitigation ratios (i.e., the amount of mitigation acreage compared to the amount of impacted habitat) shall be negotiated with the resource agencies but shall be no less than 1:1, replacing each acre of habitat lost with of an acre of equivalent or higher quality habitat. This mitigation may be in the form of habitat preservation, restoration, enhancement, and/or establishment (i.e., creation), discussed below. CoreCivic shall implement one or a combination of these options, as approved by USFWS and CDFW in permits described in MM BIO-4.
 - 1. Preservation consists of acquisition of mitigation lands containing viable occurrences of the species, or that enhance the sustainability of the occurrences by protecting buffer lands and protecting those occurrences in perpetuity under a conservation easement or an in-lieu fee program that is transferred to a qualified land trust or public agency.
 - 2. Restoration consists of the re-establishment or rehabilitation of mitigation land with the goal of returning natural or historic functions and characteristics. Restoration may result in a gain in habitat function, acreage, or both.
 - 3. Enhancement consists of activities that heighten, intensify, or improve one or more habitat functions. Enhancement results in a gain in habitat function but does not result in a net gain in habitat acreage.
 - 4. Establishment consists of the development of habitat in an area where it did not previously exist through manipulation of the physical, chemical, and/or biological characteristics of the site.

Compensatory mitigation may be in the form of permittee-responsible mitigation, in which the permittee maintains liability for the construction and long-term success of the mitigation site or through mitigation banking/in-lieu fee program, where

liability for Project success is transferred to a third party (i.e., a mitigation bank/in-lieu fee sponsor). If CoreCivic elects to provide mitigation through mitigation banking/in-lieu fee program, the mitigation bank/program shall be selected by CoreCivic and approved by the resource agencies and payment shall be made prior to the issuance of grading or building permits.

For permittee-responsible mitigation involving establishment, restoration, or enhancement of habitat, CoreCivic shall retain a qualified Biologist to prepare a Habitat Mitigation Monitoring Plan (HMMP) to mitigate for loss of desert tortoise and Mohave ground squirrel habitat. The HMMP shall be reviewed/approved by the USFWS and CDFW prior to issuance of grading or building permits. The detailed HMMP shall contain the following items:

- Responsibilities and Qualifications of the Personnel to Implement and Supervise the Plan. The responsibilities of CoreCivic or its designee, specialists, and maintenance personnel, as well as the qualifications of specialists and maintenance personnel that will supervise and implement the plan, will be specified.
- 2. **Site Selection.** Site selection for restoration, establishment, enhancement, and/or preservation mitigation shall be determined in coordination with CoreCivic, or its designee, and resource agencies. The mitigation site(s) shall be located in a dedicated open space area or on land that shall be dedicated and/or purchased off site.
- 3. **Site Preparation and Planting Implementation.** Site preparation shall include the following, as determined by specific site conditions and permit requirements: protection of existing native species, trash and weed removal, native species salvage and reuse (i.e., duff), soil treatments (i.e., imprinting, decompacting), temporary irrigation installation, erosion-control measures (i.e., rice or willow wattles), seed mix application, and container species.
- 4. **Schedule.** A schedule that requires planting to occur between October 1 and March 1 shall be developed.
- 5. **Maintenance Plan/Guidelines.** The maintenance plan shall include the following, as determined by specific site conditions and permit requirements: weed control, herbivory control, trash removal, irrigation system maintenance, maintenance training, and replacement planting.
- 6. Monitoring Plan. The site shall be monitored and maintained for a minimum of five years to ensure successful establishment of riparian habitat within the restored and created areas. The monitoring plan shall include qualitative monitoring (i.e., photographs and general observations); quantitative monitoring (e.g., randomly placed transects); performance criteria, as approved by the resource agencies; and monthly reports for the first year with quarterly reports thereafter and annual reports for all five years.
- 7. **Long-Term Preservation.** Long-term preservation of the site shall be outlined in the restoration and enhancement plan to ensure the mitigation site is not impacted by future development.

Although monitoring plans are typically scheduled to last five years, if coverage is successful prior to five years, CoreCivic or its designee may request to be released from monitoring requirements by the USFWS and CDFW.

MM BIO-6 Avoidance and Minimization Measures to Avoid Take.

- **6A. Biological Monitor.** Prior to the initiation of construction activities, CoreCivic shall retain a qualified Biologist to oversee compliance with the protection measures for desert tortoise, Mohave ground squirrel, and other special status species. The Biologist shall monitor all fence installation, vegetation clearance, and ground-disturbance activities throughout the construction phase. The Biologist shall have the authority to halt activities that are in violation of measures designated to protect the desert tortoise, Mohave ground squirrel, or other special status species. Work shall proceed only after hazards to desert tortoise, Mohave ground squirrel, and/or other special status species are removed and the species are no longer at risk. The Biologist shall have in his/her possession a copy of all the compliance measures and permits while work is being conducted on site.
- **6B. Worker Environmental Awareness Program Training.** Prior to the initiation of construction activities, and for the duration of construction activities, all new construction workers for the Project shall attend a Construction Worker Environmental Awareness Program (WEAP) training developed and presented by a qualified Biologist. The training shall address desert tortoise and Mohave ground squirrel, as well as other special status biological resources that may be encountered during construction activities; their legal protections; the definition of "take" under the Endangered Species Act; specific measures that each worker shall employ to avoid take of the desert tortoise, Mohave ground squirrel, Crotch bumble bee, and other special status species; reporting requirements; and penalties for violation of the Federal and State Endangered Species Acts. A fact sheet conveying this information shall be distributed to all workers. All workers who attend the WEAP training shall sign a training log, which will also be signed by the qualified Biologist conducting the training. The WEAP training logs shall be submitted with Project construction monitoring reports.
- **6C. Protective Fencing.** Prior to the issuance of grading or building permits, CoreCivic or its designee shall ensure that the entire Project site is enclosed with permanent or temporary desert tortoise exclusion fencing meeting current USFWS specifications. During construction of the utility alignment, temporary exclusion fencing shall be installed between the active work area and adjacent habitat, if suitable habitat is adjacent. All construction-related activities, including staging areas, equipment access, and disposal or temporary placement of spoils, shall be located within exclusion fencing.

<u>Permanent Fencing</u>: The fencing type shall include 1-inch by 2-inch vertical mesh galvanized fence material, extending at least 2 feet above the ground and buried at least 1 foot under the ground surface. Where burial is impossible, the mesh shall be bent at a right angle toward the outside of the fence and covered with dirt, rocks, or gravel to prevent desert tortoise from digging under the fence.

<u>Tortoise Guards</u>: Tortoise guards shall be installed at all site entry points; the tortoise guards shall be engineered so that an escape route is accessible for tortoises on each side of the guard. Additionally, tortoise guards shall drain properly following rain; water should not pond in the bottom of the tortoise guard.

<u>Temporary Fencing</u>: Temporary fencing shall extend at least 2 feet above the ground and shall be buried at least 1 foot under the ground surface. Supporting stakes shall be sufficiently spaced to maintain fence integrity with at least one

every 10 feet. Temporary fencing shall be replaced when the integrity of the fencing is no longer reliable.

Monitoring: A qualified Biologist shall monitor construction of the permanent fence and/or installation of temporary fencing to ensure no desert tortoise are impacted by construction of the fence. A qualified Biologist shall inspect all fencing (including existing exclusion fencing at the WWTP when active construction is occurring there) on a weekly basis throughout construction and following any large weather events that may have damaged the fence. The Biologist shall report any damaged sections of the fence to the construction contractor and CoreCivic or its designee so that the fence can be repaired immediately (i.e., within 24 hours). If possible, the Biologist should attempt to temporarily fix the fence or block any opening to prevent tortoise from entering prior to the fence repair by the construction contractor. Sand, soil, plant material, or other debris that builds up against the fence shall be cleared regularly to ensure the fence can be properly inspected by the Biologist and to ensure that it continues to provide adequate exclusion of desert tortoise.

During operation of the Project, the permanent exclusion fence shall be monitored monthly and following any large weather events that may have damaged the fence. Any damage shall be reported and repaired within 48 hours and all repair activities must be monitored by a qualified Biologist. Sand, soil, plant material, or other debris that builds up against the fence shall be cleared regularly to ensure the fence can be properly inspected and to ensure that it continues to provide adequate exclusion of desert tortoise. All instances of substantial damage to the fencing shall be reported in the Annual Report to USFWS. If the qualified Biologist determines that the fence damage was sufficient for desert tortoise to pass through, then the Biologist will conduct a survey of the area between the exclusion fencing and the security fencing to confirm no desert tortoise are located within the repaired fence. If the Biologist discovers desert tortoise within the fence line, then an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise), will translocate it outside the fencing per the Desert Tortoise Relocation Plan.

6D. Staging/Access. All construction on the Project site, including the impact area (i.e., disturbance footprint), staging areas, access, and disposal or temporary placement of spoils, shall occur within the Project site boundaries. All construction on the utility alignment, including the impact area (i.e., disturbance footprint), staging areas, access, and disposal or temporary placement of spoils, shall occur within the existing disturbed footprint of the road (i.e., paved and/or graded areas); construction of the utility alignment shall not impact adjacent habitat areas. All construction at the WWTP, including staging areas, access, and disposal or temporary placement of spoils, shall occur within the impact area (i.e., the disturbance footprint). Project-related vehicles shall observe a daytime speed limit of 20 mph, except on City/county roads and state and federal highways. If night-time construction occurs, the speed limit shall be reduced to 10 mph.

During operation of the Project, no vehicles should be operated on non-paved roads beyond the desert tortoise exclusion fencing. If vehicles or equipment need to operate beyond the fencing, all vehicles shall observe a daytime speed limit of 20 mph. The same speed limits shall also be observed on any off-site mitigation properties.

6E. Clearance Surveys. Prior to any vegetation removal or grading but following installation of protective fencing on the Project site, CoreCivic shall retain a qualified Biologist to perform a desert tortoise clearance survey within the fenced area following current USFWS protocol. The survey will be overseen by a Lead Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) who may be assisted by qualified Biological Monitors under the supervision of the Authorized Biologist. A minimum of two clearance passes shall be completed during the tortoise's active period from late March through May or September to October. Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) to a location outside the Project site using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107 °F (42 degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures. No tortoises shall be translocated between mid-April and early October unless ambient temperatures are favorable. If the schedule of construction requires that clearance surveys continue past the safe time to translocate tortoises (i.e., past early April), then continued searches for tortoises would include temporarily affixing found tortoises with transmitters for ease of refinding them and translocating them during autumn at a safe time for translocation. Once the Project site is deemed free of desert tortoises after two consecutive clearance passes and excavation of all potential burrows, then heavy equipment shall be allowed to enter the Project site to perform construction activities. Following completion of the clearance survey, a Letter Report shall be prepared by the Biologist to document the methods and results of the clearance surveys, the capture and release locations of all tortoises found, individual tortoise data, and any other relevant data. The report shall be submitted to the USFWS and CDFW within 30 days of completion of the clearance survey.

Prior to blasting, a qualified Biologist shall conduct a pre-construction survey of the indirect impact area (i.e., within 200 feet of the blasting area). Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) more than 500 feet from the blasting area using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107°F (42degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures. Any burrows within 200 feet of the blasting area shall be excavated using standard techniques approved by the USFWS and CDFW.

During construction of the utility alignment, a qualified Biologist shall conduct a pre-construction clearance sweep of the active work area within temporary exclusion fencing prior to the initiation of work each day. Any tortoises found shall be translocated by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise) to a location outside the active work area using techniques approved by the USFWS and CDFW. Translocation shall occur only when daily ground temperatures do not exceed 107°F (42 degrees Centigrade), so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of lethal temperatures.

In the unlikely event that a tortoise is found in the work area during Project operations, the tortoise shall be captured by an Authorized Biologist (i.e., one approved by USFWS and CDFW to handle desert tortoise); boxed in a clean,

escape-proof box; and temporarily maintained in a cool, quiet, safe location until the Authorized Biologist can remove it from the site, within no more than one day. The capture location will be recorded. If ambient temperatures exceed lethal levels on a daily basis, the Authorized Biologist shall consult with the USFWS and CDFW prior to transporting the tortoise off site.

6F. Vehicle Clearance. For the duration of construction activities, CoreCivic shall ensure that vehicle parking and storage shall occur within the desert tortoise exclusion fencing. Prior to moving any vehicles within the Project site or WWTP or vehicles associated with construction along the utility alignment, the worker shall inspect the ground under the vehicle for the presence of desert tortoise before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If it does not move within three hours, an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) shall remove and relocate the animal to a safe location outside the Project site or outside the utility alignment work area per the Desert Tortoise Relocation Plan.

During operation of the Project, no vehicles or equipment should be operated on non-paved roads beyond the desert tortoise exclusion fencing. If vehicles or equipment need to operate beyond the fencing, each driver or operator shall inspect the ground under the vehicle for the presence of desert tortoise before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If it does not move within three hours, an Authorized Biologist (i.e., one approved by the USFWS and CDFW to handle desert tortoise) shall remove and relocate the animal to a safe location outside the Project site or outside the utility alignment work area per the Desert Tortoise Relocation Plan.

- **6G. Work Hours.** Work shall occur only during daylight hours unless otherwise approved by the USFWS and CDFW.
- **6H. Entrapment.** At the end of each work day, a qualified Biologist shall survey all trenches, bores, and other excavations to ensure no wildlife are trapped; any wildlife observed shall be relocated to a safe area. Only an Authorized Biologist shall handle desert tortoise and/or Mohave ground squirrel (i.e., one approved by both USFWS and CDFW to handle desert tortoise and/or approved by CDFW to handle Mohave ground squirrel). Following this final inspection, the Biologist shall ensure that the construction contractor has backfilled or adequately covered all trenches, bores, and other excavations to prevent wildlife from falling into them. If backfilling or covering the trenches, bores, and/or excavations is not feasible, then wildlife escape ramps shall be provided at least every 50 feet. Additionally, any pipes, culvert, or similar structures shall be inspected before the material is moved, buried, or installed.
- **6I. Raven Management.** CoreCivic shall retain a qualified Biologist to prepare a Common Raven Management Plan in accordance with USFWS guidelines to describe management measures for common raven during construction and operation of the Project. CoreCivic or its designee shall ensure the plan is implemented. Measures shall include design considerations for structures to eliminate structures that could be used as perches for hunting; management of trash, roadkill, and ponded water so as not to attract common raven to the Project site, and the use of deterrents to discourage nesting by common raven, During construction, water used for dust abatement shall be minimized to prevent the formation of puddles that could attract predators of the desert tortoise to the area.

During operation and maintenance, project-related water runoff will be properly managed to not result in puddles outside the designated retention basins. During construction and operation, trash shall be contained in closed containers and removed daily to avoid attracting predators to the area.

- **6J. Pets.** CoreCivic or its designee shall ensure that no pets are allowed at the construction site or outside the exclusion fencing during operation.
- **6K. Protection of Wildlife.** Wildlife shall not be intentionally killed or injured on the Project site, along the utility alignment, at the WWTP, or in the surrounding area during construction or operation.
- **6L. Pesticides.** The use of rodenticides and herbicides on the Project site or in surrounding areas shall be restricted. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, the California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
- **6M. Reporting.** For the duration of construction activities, the Biologist shall complete daily monitoring forms that shall be summarized into monthly monitoring reports, which shall be provided to the USFWS and CDFW. The monthly monitoring reports shall document compliance with the mitigation measures and shall include WEAP training logs, weekly fence inspection forms, and California Natural Diversity Database forms for any special status species observations. Additionally, the Biologist shall prepare a final report summarizing compliance throughout Project construction and documenting the level of take associated the Project.

MM BIO-7Burrowing Owl. Per the Staff Report on Burrowing Owl Mitigation (CDFG 2012), CoreCivic shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl no less than 14 days prior to any ground disturbance by the Project and no greater than 30 days prior to ground disturbance in each Project area. The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available).

If an active burrow is observed outside the breeding season (September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in CDFG 2012. This includes any active burrows within 200 feet of the blasting area (if blasting is required). One-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied, as verified by site monitoring and scoping by a desert tortoise Authorized Biologist, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools. Prior to excluding an owl from an active burrow, a receptor burrow survey shall be conducted to confirm that at least two potentially suitable unoccupied burrows are within approximately 688 feet prior to installation of the one-way door. If two natural receptor burrows are not located, one artificial burrow shall be created for every burrow that would be closed.

If an active burrow is observed outside the breeding season (September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate

protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year (see Table below). The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. The WEAP training shall include information on the protective buffer. CoreCivic or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.

If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on CDFW guidelines. The buffer shall range from 650 to 1,640 feet depending on the level of impact and the time of year (Table 10). The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. The WEAP training shall include information on the protective buffer. CoreCivic or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows. Construction shall be allowed to proceed when the qualified Biologist has determined that all fledglings have left the nest. Compensatory mitigation for the loss of foraging habitat shall be satisfied with implementation of MM BIO-6.

TABLE 4.4-6
BURROWING OWL PROTECTIVE BUFFER SIZES

		Level of Disturbance				
	Time of Year	Low	Medium	High		
Nesting sites	April 1 to August 15	656 feet (200 meters)	1,640 feet (500 meters)	1,640 feet (500 meters)		
Nesting sites	August 16 to October 15	656 feet (200 meters)	656 feet (200 meters)	1,640 feet (500 meters)		
Nesting sites	October 16 to March 31	164 feet (50 meters)	328 feet (100 meters)	1,640 feet (500 meters)		

Upon completion of the pre-construction burrowing owl survey, a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey within two weeks of completion of the survey effort. If an active burrow is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any additional correspondence with the CDFW.

If time lapses of greater than 30 days occur during construction in a particular portion of the work area, an additional survey shall be conducted by a qualified Biologist within 24 hours prior to vegetation clearing and/or ground disturbance in that area. If any new burrowing owl burrows are observed, the conditions above shall be applied.

MM BIO-8

Desert Kit Fox/American Badger Burrows. CoreCivic shall retain a qualified Biologist to conduct a pre-construction burrow survey for desert kit fox and American badger no less than 14 days and no more than 30 days prior to initiation of ground disturbance/construction activities. Ideally, this survey shall be conducted prior to the initiation of the breeding season (i.e., February 1) to allow for passive exclusion, if necessary. The pre-construction survey shall include the

Project site plus a 200-foot buffer (if access is available). If no active burrows are found, no further mitigation would be required.

If an active burrow is observed outside the breeding season (September 16 to January 31) and it cannot be avoided, the burrow shall be closed using passive exclusion. This includes any active burrows within 200 feet of the blasting area (if blasting is required). One-way doors shall be used to exclude American badgers from their burrows; doors shall be left in place for at least five nights. Progressive soil blocking shall be used to discourage use by desert kit fox. Once the burrow is determined to be unoccupied (i.e., not used for five nights), as verified by site monitoring and scoping by a desert tortoise Authorized Biologist, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools.

If an active burrow is observed outside the breeding season (September 16 to January 31) and it can be avoided, a 50-foot protective buffer shall be delineated around the burrow. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. The WEAP training shall include information on the protective buffer. CoreCivic or its designee shall consult with CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.

If an active den is observed during the breeding season (February 1 to September 15), the active den shall be protected with a 100-foot buffer until breeding activity has ended. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. The WEAP training shall include information on the protective buffer. CoreCivic or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting the occupied den. Construction shall be allowed to proceed when the qualified Biologist has determined that the burrow is no longer active based on site monitoring (i.e., no activity has been observed at the burrow for five nights).

Upon completion of the pre-construction burrow survey, a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey within two weeks of completing the survey effort. If an active burrow/den is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any additional correspondence with the CDFW.

MM BIO-9

Best Management Practices. CoreCivic or its designee shall incorporate Best Management Practices (BMPs), including applicable measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged by proposed Project activities does not adversely affect the Project area. In particular, BMPs shall be designed to prevent (to the extent feasible) the runoff of toxins, chemicals, petroleum products, or other elements that might degrade water quality. Additionally, BMPs shall be used to minimize erosion.

The areas where stockpiling can occur shall be selected in consultation with the monitoring Biologist. Spoils shall be stockpiled in disturbed areas lacking native vegetation. The construction contractor shall clearly mark stockpile areas to define the limits where stockpiling can occur.

The construction contractor shall designate an area for vehicle maintenance that is not within or adjacent to drainages or native vegetation. Fueling and maintenance of equipment shall take place within the vehicle maintenance area. Impervious ground surfaces or plastic covering shall be used to prevent spillage or leakage onto the ground surface. Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.

- **MM BIO-10**
- **Night Lighting.** CoreCivic or its designee shall ensure that night lighting shall be directed away from open space areas and shielding shall be incorporated in the final Project design to minimize spillover of night lighting into adjacent open space to the greatest extent practicable. Any such light fixtures installed adjacent to open space areas shall direct/reflect light downward and away from adjacent habitat areas.
- **MM BIO-11**
- Landscaping. CoreCivic or its designee shall retain a qualified Biologist to review the landscaping plan to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the surrounding natural open space. A list of potential landscaping plant species shall be submitted to the Biologist for review; the Biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) are not included on the list. The Biologist shall make recommendations for more suitable plant species if necessary. Once a final plant palette is prepared, landscaping installed in the development area shall include only species on the approved palette.
- **MM BIO-12**
- **Prevention of the Spread of Weed Seeds.** The introduction of exotic plant species shall be avoided and minimized to the extent practicable. Weed seeds entering the construction area via vehicles shall be minimized by requiring construction vehicles to be washed prior to delivery to the Project site. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting construction areas on vehicles. Additionally, wattles used for erosion control shall be certified as weed-free.
- **MM BIO-13**
- Jurisdictional Permits. Prior to any impacts on waters under the regulatory authority of the Regional Water Quality Control Board (RWQCB) or the CDFW, CoreCivic, or its designee, shall prepare and process an RWQCB Report of Waste Discharge and a CDFW Section 1602 Notification of Lake or Streambed Alteration, as applicable. Notification of Project activities at the WWTP shall be submitted to the CDFW in order to ascertain whether modification of existing wastewater ponds is subject to CDFW jurisdiction. As part of the permitting process, it is recommended that CoreCivic, or its designee, schedule a pre-application meeting with RWQCB and CDFW staff to discuss site conditions, the Project, biological and jurisdictional resources, impacts to jurisdictional resources resulting from implementation of the Project, proposed avoidance and minimization measures, the proposed compensatory mitigation program to offset Project impacts, and the regulatory permit process. The USFWS may also be involved in the pre-application field meeting to discuss species impacts (MM BIO-4). Once the RWQCB and CDFW permits have been obtained, they shall be submitted to the City prior to any grounddisturbing activities.

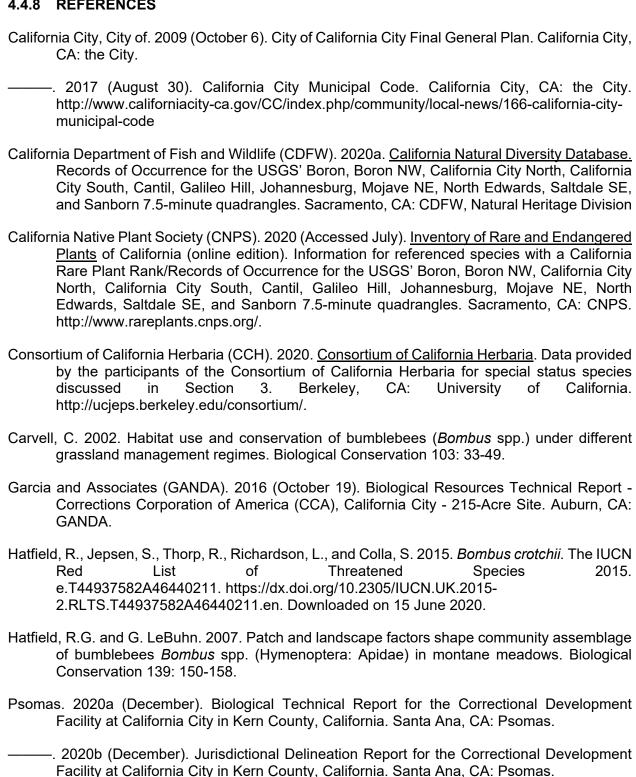
CoreCivic shall implement and comply with all measures required by the RWQCB and CDFW permits. Compensatory mitigation may include restoration (i.e.,

re-establishment or rehabilitation), establishment (i.e., creation), enhancement, and/or preservation of jurisdictional resources. Compensatory mitigation may occur through permittee-responsible mitigation, payment to an in-lieu fee program, or purchase of compensatory mitigation credits from an approved mitigation bank. Mitigation ratios (i.e., the amount of mitigation acreage compared to the amount of impacted habitat) shall be negotiated with the regulatory agencies, but shall be no less than 1:1, replacing impacted jurisdictional resources with jurisdictional resources of equivalent or higher quality habitat value. It should be noted that mitigation for impacts on jurisdictional resources can be a subset of compensatory mitigation provided for special status species habitat (MM BIO-5).

4.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of MMs BIO-1 through BIO-13, impacts on sensitive biological resources resulting from implementation of the Project would be reduced to less than significant levels.

4.4.8 REFERENCES



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Facility Project in Kern County, California. Santa Ana, CA: Psomas.

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- U.S. Department of the Interior Bureau of Land Management (BLM). 2006 (March). Record of Decision, West Mojave Plan. Moreno Valley, CA: BLMhttps://www.blm.gov/ca/pdfs/cdd_pdfs/wemo_pdfs/wemo_rod_3-06.pdf.

4.5 CULTURAL RESOURCES

This section evaluates the potential cultural resources impacts associated with the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project). Information in this section is derived from the Phase I Cultural Resources Inventory for the Correctional Facility at California City prepared by Psomas in May 2021. The 2018 Cultural Resource Inventory included a record search that was completed on February 13, 2017 at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS). The 2017 record search identified previous cultural resource studies and known resources within the Project area and a 0.5-mile buffer surrounding the Project's boundaries. The Phase I Cultural Resource Inventory was supplemented by an updated record search was completed by the SSJVIC on August 17, 2020 to increase the search radius to 1-mile surrounding the Project's boundaries to accommodate the Project's future off-site Southern California Gas natural gas line that will be located along California City Boulevard. The findings of the Phase I Cultural Resources Inventory are summarized below, with the complete report provided in Appendix D of this EIR.

4.5.1 RELEVANT PROGRAMS AND REGULATIONS

<u>Federal</u>

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, as amended, calls for the preservation of cultural resources through one of its implementing regulations (36 *Code of Federal Regulations* [CFR] Section 800, Protection of Historic Properties), as well as under the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are also protected under Section 101(d)(6)(A) of the NHPA.

Section 106 of the NHPA (16 *United States Code* [USC] Section 470f) requires that federal agencies consider the effects of proposed projects on historic properties as part of the environmental assessment process. It defines "historic properties" as:

Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Authorized by the NHPA, the U.S. Department of the Interior (DOI) National Park Service's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. National Register listing places no obligations on private property owners. It places restrictions on the use, treatment, transfer, or disposition of private property. Listing on the NRHP does, however, incentivize preservation. Property owners can become eligible to receive federal preservation grants, and federal tax credits; they may utilize alternative methods of preservation in compliance with building code provisions. In order for a resource to qualify for listing on the NRHP, the quality of significance (36 CFR 60.4) in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity and meets at least one of the following criteria:

- (a) Is associated with events that have made a significant contribution to the broad patterns of our history;
- (b) Is associated with the lives of persons significant in our past;
- (c) Embodies the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Has yielded, or may be likely to yield, information important in prehistory or history.

The National Park Service's (1995) *How to Apply the National Register Criteria* recognizes seven aspects or qualities that, in various combinations, define integrity. The seven aspects of integrity are described in terms of the following:

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting is the physical environment of a historic property.
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.

The steps in evaluating integrity are further described by the National Park Service as:

- Define the essential physical features that must be present for a property to represent its significance;
- Determine whether the essential physical features are visible enough to convey their significance;
- Determine whether the property needs to be compared with similar properties; and
- Determine, based on the significance and essential physical features, which aspects of integrity are particularly vital to the property being nominated and if they are present.

Secretary of the Interior's Standards

The Secretary of the Interior's (SOI's) Standards were codified in 1995 (36 Code of Federal Regulations [CFR] Part 68) to establish professional standards that apply to all proposed development grant-in-aid projects assisted through the National Historic Preservation Fund and to serve as general guidance for work on any other historic building. The SOI Standards apply to

historic properties of all periods, styles, types, materials, and sizes. The ten Standards for Rehabilitation are:

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- 10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Native American Graves and Repatriation Act

The Native American Graves and Repatriation Act (NAGPRA) established a means for Native Americans, including Indian Tribes, to request the return of human remains and other sensitive cultural items held by federal agencies or federally assisted museums or institutions. NAGPRA also contains provisions regarding the intentional excavation and removal of, inadvertent discovery of, and illegal trafficking in Native American human remains and sensitive cultural items.

State

California Register of Historical Resources

The Office of Historic Preservation (OHP) administers the California Register of Historical Resources (CRHR), which was established in 1992 through Sections 5020 et seq. of the *California Public Resources Code* (PRC) to be "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources

and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]).

The CRHR listing criteria focus on resources of State, rather than national, significance. The CRHR includes the following types of resources, either as an individual property or a contributor to a historic district: (1) properties listed in or determined eligible for listing in the NRHP (automatically included); (2) California Historical Landmarks numbered 770 and higher (automatically included); (3) California Points of Historical Interest recommended for listing by the OHP; and (4) resources nominated for listing and determined eligible by meeting one or more of the CRHR criteria.

The criteria for listing resources in the CRHR, which were expressly developed to be in accordance with the criteria developed for listing in the NRHP, are stated below.

The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and that:

- (1) Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or
- (2) Are associated with the lives of persons important to local, California, or national history; or
- (3) Embody the distinctive characteristics of a type, period, region, or method of construction, or that represent the work of a master, or that possess high artistic values; or
- (4) Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The minimum age criterion for the CRHR is generally 50 years. Under the Special Considerations provided in the California Code of Regulations (Title 14, Division 3, Chapter 11.5, 4852[d][2]), resources less than 50 years old may be eligible for listing if "it can be demonstrated that sufficient time has passed to understand its historical importance". Once listed, the historical resource is protected from any detrimental change and any alteration, repair, or addition must be reviewed and approved by the State Historical Resources Commission (SHRC) under the State Historical Building Code to ensure that the quality of the resource remains intact.

California Environmental Quality Act

Archaeological and Historical Resources

CEQA requires a lead agency to determine whether a project would have a significant effect on the environment, including historical resources. CEQA Guidelines Section 15064.5, Determining the Significance of Impacts to Archeological and Historical Resources, requires that all private and public activities not specifically exempted should be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California".

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change to a historical resource. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The State CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of a historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a "historical resource" if it:

- Is listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (*California Public Resources Code* [PRC] Section 5024.1, Title 14 *California Code of Regulations* [CCR], Section 4850 et seq.).
- 2. Is included in a local register of historical resources or is identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC.
- 3. Is a building or structure determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

Discovery of Human Remains

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the PRC states that, if the remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD shall complete his/her inspection and make a recommendation within 48 hours of being granted access to the site. The MLD's recommendation shall be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials. If the landowner rejects the MLD's recommendations, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code*, Section 5097.98).

4.5.2 EXISTING CONDITIONS

Prehistoric Background

Chronologies that generally describe the sequence of the later prehistoric periods of California's southern desert region are discussed below.

Pleistocene (10,000 B.C. - 8000 B.C.)

A firm date for the initial human occupation of the Mojave Desert has not yet been established. While several controversial claims of Pleistocene-age (pre-Clovis) finds such as the "Early Man Site" of Calico Hills (Leakey et al. 1968,) and the Lake Manix lithic industry have been documented, most archaeologists remain unconvinced by available Mojave Desert data. However, the growing acceptance of evidence for pre-Clovis occupations elsewhere in the Western Hemisphere suggests the possibility that such evidence may yet be found within this region as well. For the moment, the earliest broadly accepted evidence of human presence in the Mojave Desert is the Clovis Complex.

Clovis populations consisted of small, mobile groups that hunted and gathered near permanent sources of water such as pluvial lakes. Clovis technology included large, lanceolate-shaped stone tool bifaces with distinctive fluting, used to thin and flatten the base for hafting. Other tools associated with the Clovis Complex were large side scrapers, blades struck from prepared cores, and a mixture of expedient flaked tools.

Early Holocene (8000 B.C. - 6000 B.C.)

The communities that lived in the Mojave Desert witnessed and were profoundly affected by great environmental changes during the gradual Pleistocene–Holocene transition. Temperatures at the time became warmer, but remained cooler and moister than today. Shallow lakes and marshes that were biologically very productive marked the Mojave Desert. These lakes and marshes were surrounded by desert vegetation typical of later time periods, most prominent being white bursage and, later, creosote bush. Some low-elevation locales retained juniper and sagebrush habitats. By the early Holocene period, warmer temperatures, reduced precipitation, and the eventual dehydration of the pluvial lakes are believed to have led to irregularities in the distribution and abundance of resources. These climatic changes created the first true "desert culture" in the region, which is known as the Lake Mojave Complex.

The Lake Mojave Complex is characterized by the heavy, stemmed projectile points of the Great Basin Stemmed series such as Lake Mojave and Silver Lake projectile point series. Other tools that are recognized as being part of the Lake Mojave Complex include bifaces, steep-edged unifaces, crescents, the occasional cobble-core tool, and, rarely, ground stone implements. This tool kit represents a generalized adaptation to highly variable terrain. For example, the crescent is thought to have served as a tool with multiple functions, including use as a spear tip to hunt waterfowl.

The changing climate, distribution of occupational sites, and the all-terrain tool kit suggest that the inhabitants of the Mojave Desert during the early Holocene period developed a broad-ranging subsistence strategy based on patterns of "intensive environmental monitoring" (Sutton 2007:237): the people monitored the seasons and moved in the direction of known resource patches.

Middle Holocene (7000 B.C. - 3000 B.C.)

The Middle Holocene climate, although more arid than periods before and after, was still highly variable, with multiple oscillations between wetter and drier conditions occurring throughout the period. In addition, although the lakes and marshes of the early Holocene period had dried up, streams and springs in the Mojave Desert may have maintained enough water flow from nearby ranges, at various times and places, to provide suitable water sources to sustain human activity, albeit at low densities. Between 7,000 B.C. and 5,000 B.C., temperatures appear to have risen and aridity appears to have increased, peaking between 6,000 B.C. and 5,000 B.C. Consequently, lowland ephemeral lakes and streams began to dry up and vegetation communities capable of supporting large game animals became limited to a few isolated contexts. Settlement patterns adapted, shifting to upland settings where sources of water still existed. This change in land-use patterns also correlated with adjustments in tool assemblage content and diversity, resulting in the emergence of what is known as the Pinto Complex.

The Pinto Complex was characterized by shifts in subsistence patterns and adaptations, with greater emphasis placed on the exploitation of plants, as well as a continued focus on artiodactyls and smaller animals. It had a wider distribution throughout the Mojave Desert than the previous complexes. The pan-desert nature of the complex suggests that Pinto people practiced a settlement system with a high degree of residential mobility. The distinctive characteristics of the Pinto Complex tool kit include "indented base and bifurcate base projectile points with robust basal ears and weak shoulders." Other diagnostic artifacts typical of this complex include large and small leaf-shaped bifaces, domed and heavy-keeled scrapers, numerous core/cobble tools, large metates and milling slabs, and shaped and unshaped hand-stones (manos).

Near the end of the Middle Holocene period, the climate became hotter and drier, marked by a period of "cultural hiatus" between 3000 B.C. and 2000 B.C.; during this gap, the Mojave Desert region appears to have had little to no human occupation.

Late Holocene (2000 B.C. – Historic Contact)

The climate of the prehistoric Late Holocene period approximates that of today, with cooler and moister conditions than the Middle Holocene period, but not as cool and moist as the Early Holocene period. As with the Middle Holocene period, the climate of this period was highly variable. Many lakes once again rose to high stands, and plant communities took on their modern distribution patterns; however, these lake levels fluctuated, at times dramatically, throughout the period. At least two major droughts are thought to have occurred within the Sierras, at ca. A.D. 892 to A.D. 1112 and ca. A.D. 1209 to A.D. 1350. These droughts were followed by a cooler and wetter period between 600 and 150 years ago. People returned to the region and, compared to previous settlement behavior, human subsistence strategies changed significantly. This subsistence strategy correlated with adjustments in artifact/tool assemblage content and diversity, resulting in the emergence of the Gypsum Complex.

The Gypsum Complex was characterized by large (dart-point size) projectile points but also included points with a more refined notched (Elko), a concave base (Humboldt), and small-stemmed (Gypsum) forms. In addition to diagnostic projectile points, the Gypsum Complex sites included leaf-shaped points, rectangular-based knives, flake scrapers, T-shaped drills and, occasionally, large scraper planes, choppers, and hammer stones.

By A.D. 200, the climate in the region had become slightly cooler. Population size appears to have increased, as evidenced by a higher frequency of archaeological sites. This period in California prehistory is marked as the Rose Spring Complex. By the onset of the Rose Spring Complex at A.D. 200, dart-size points were replaced with smaller Rose Spring projectile points,

signaling the introduction of the bow and arrow. This innovation may also correspond with the beginning of the Numic expansion, which many researchers believe emanated from southeastern California. Major villages and numerous smaller sites dating to this period have been recorded in eastern California, many containing bedrock milling features in addition to portable milling equipment. In the western Mojave's Antelope Valley near Edwards Air Force Base, cemeteries and deep cultural middens are associated with large pit house village sites.

Late Prehistoric Complex (A.D. 1100–Historic Contact)

During the Late Prehistoric period (circa A.D. 1100 to A.D. 1770), Rose Spring-style points were replaced with smaller Desert Side-Notched and Cottonwood series projectile points. Resource intensification and specialization are suggested by an increased variety of tool forms; use of new technologies such as the mortar and pestle and ceramics; use of storage facilities; and increased diversity in the locations of archaeological sites. In the central Mojave Desert, the Mojave River became a primary focus of occupation, and trade networks increased along the Mojave River and over the San Gabriel Mountains. In the western Mojave's Antelope Valley and Fremont Valley, evidence suggests obsidian for stone tools was a valuable commodity for the region. The obsidian recovered in this area most likely comes from the Coso Volcanic Fields in the northeast.

Ethnographic Background

According to ethnographic maps, the Project area falls within the traditional territory of the Kitanemuk and Kawaiisu groups, south and southeast of the Gabrielino/Tongva, respectively, and west of the Southern Paiute. These boundaries are loosely defined due to the highly mobile nature of desert subsistence. The Kitanemuk language is part of the Serran division of a branch of the Takic family of the Uto-Aztecan linguistic stock. The two Serran languages, Kitanemuk and Serrano, are closely related.

Little is known about the ethnographic period in the western Mojave Desert region. Local groups continued to live in large, semi-permanent villages during the winter and during the spring, summer, and fall would separate into smaller groups to hunt and gather the locally available resources including, among others, piñon nuts, mesquite, and yucca. Most of the ethnographic groups of the area shared similar cultural traits and practices and, for the most part, maintained friendly relations with each other.

Historic Background

Post-contact history for the state of California is generally divided into three periods: the Spanish period (1769 to 1822), Mexican period (1822 to 1848), and American period (1848 to present). Although Spanish, Russian, and British explorers made brief visits from 1529 to 1769, the Spanish period in California began with the establishment of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain marks the beginning of the Mexican period. The signing of the Treaty of Guadalupe Hidalgo in 1848, signifying the end of the Mexican–American War, marks the beginning of the American period, when California became a territory, and two years later in 1850 the seventeenth state, of the United States of America.

In 1772, Lieutenant Pedro Fages and a small force of Spanish soldiers became the first Europeans to enter the western Mojave Desert. Other explorers passed through the valley over the next century, but minor change to the pattern of life of the local populations of the valley was evident until 1876 when the Southern Pacific Railroad completed its line between the Los Angeles Basin and the San Joaquin Valley.

At the beginning of the 20th century, after a long drought, much of the western Mojave Desert was considered worthless and ownership largely reverted to the State of California. However, technological innovations in the new century, such as gasoline engines to pump well water, construction of aqueducts, and improved irrigation techniques, among other advances, brought people back into the valley. The needs of World War I brought continued agricultural expansion, and World War II caused radical changes with the completion of Edwards Air Force Base and the development of the aerospace industry.

The western Mojave Desert region became an important stop for the Twenty Mule Team wagons that operated between Death Valley and Mojave (1884 to 1889). Teams followed the route from the Harmony Borax Mining Company works to the railroad loading dock in Mojave, which was over 165 miles. The ore wagons used by the mule teams for transporting borax were also built in Mojave. New borax discoveries in 1889 near Barstow, California halted the transportation of the mineral across the desert. The Twenty Mule Team Borax Terminus in Mojave is listed as California Historical Landmark No. 652.

Cultural Resources Record Searches

The South San Joaquin Valley Information Center (SSJVIC), located on the campus of California State University, Bakersfield, houses records of the California Historical Resources Information System (CHRIS) for Fresno, Kern, Kings, Madera, and Tulare Counties. Psomas requested a CHRIS cultural resources records search for the project area on February 13, 2017. The records search included a 0.8-kilometer (½-mile) radius around the project area and was conducted by SSJVIC staff. The purpose of the literature search was to identify prehistoric or historic archaeological sites or historic buildings and structures previously recorded within and around the project area.

The SSJVIC record search identified 22 prior cultural resources studies within the ½-mile search radius that were initiated due to planned urban and residential developments, utilities projects, and academic pursuits. The studies were completed as early as 1974 and as recently as 2014. These studies are listed in Table 4.5-1, 11 of which traversed the Project site or utility corridor alignment.

The records searches also identified 17 previously recorded cultural resources within the $\frac{1}{2}$ -mile search radius of the project area (see Table 4.5-3). The recorded resources include seven isolates, nine prehistoric sites, and one historic site. The prehistoric sites include lithic scatters and one habitation site. The historic site is Twenty Mule Team Road. Of the 17 previously recorded cultural resources, four are located on the Project site or the utility corridor alignment.

An additional record search was completed by the SSJVIC on August 17, 2020 to increase the search radius to 1-mile. The SSJVIC record search identified an additional 5 prior cultural resources studies located outside of the original ½-mile search radius, but within 1-mile of the Project boundaries (see Table 4.5-2). These studies were initiated due to planned urban and residential developments, utilities projects, and academic pursuits and were conducted between 2002-2013. One new study (KE-05070), an update and analysis of a Phase II archaeological field study of a prehistoric site (CA-KER-2468) located outside of the Project boundaries, but within ½-mile of the Project area was conducted in 2018 by Psomas.

The 2020 record search also identified an additional 7 resources located outside of the original ½-mile search radius, but within 1-mile of the Project boundaries (see Table 4.5-4). These 7 resources contain a historic structure along Neuralia Road were recorded by EDAW, Inc. in 2007.

TABLE 4.5-1 2017 CULTURAL RESOURCE RECORD SEARCH STUDIES WITHIN ½-MILE OF THE PROJECT AREA

Report Number	Author(s)	Year	Title	Type of Study/Comments	Proximity to Site*	
KE-00271	Bissell, R.M.	1997	Cultural Resources Reconnaissance of a Proposed Sewer and Power Line Route Near California City, Kern County, California	Archaeological, Field Study	Within	
KE-00274	Robinson, R.W.	1977	Cultural Resource Investigation Concerning California City: Clean Water Grant No. C-06-1361-010, California City, California	Archaeological, Field Study	Within	
KE-00300	Breece, W.H., S. Dies, T, Snyder and E. Gardner	1979	Second Community Project Site of California City in Kern County, California	Archaeological, Field Study	Outside	
KE-00358	Cunkleman, S. and J. Murray	1990	Archaeological Survey of Section 12, T 32S, R 38E, a 640 Acre Parcel Near California City, California	Archaeological, Field Study	Within	
KE-00372	Dillon, B.D.	1991	Archaeological Resources Investigation and Impact Assessment for the California City Wastewater Treatment Plant Expansion Project, Kern County, California	Archaeological, Field Study	Within	
KE-00627	Love, B. and W.H. De Witt	1990	Cultural Resources Evaluation for Tract 5340, California City, Kern County, California	Archaeological, Field Study	Within	
KE-00666	Moran, S.J. and R.H. Werner	1992	Archaeological Study of the Randsburg-Mojave Road Street Improvements, in California City, Kern County, California	Archaeological, Field Study	Outside	
KE-00834	Parr, R.E.	1991	Cultural Resource Assessment of Assessor's Parcel 229-020-36 and 229-020-37	Archaeological, Field Study	Within	
KE-00946	Pruett, C.L.	1990	Archaeological Assessment of Ten Acres of Land in California City, Kern County, California Archaeological, Field Study		Within	
KE-01034	Schiffman, R.	1974	Archaeological Environmental Impact Report for the Proposed Project at California City		Outside	
KE-01388	Schiffman, R.	1990	Archaeological Investigation of Tentative Tract #5359 Section 15, Township 32S, 37E, California City, Kern County, California		Outside	
KE-01611	Sutton, M.Q. and P. de Barros	1989	Class III Archaeological Inventory of 1600 Acres of Public Lands Near California City, Kern County	Archaeological, Evaluation	Outside	
KE-01791	White, R.S.	1990	Archaeological Assessment of 317 + Acres Surrounding the Tierra Del Sol Golf Club in California City, Kern County	Archaeological, Field Study	Outside	
KE-02111	Harry, K.G.	1992	Lithic Procurement and Rock Varnish Dating: Investigations at CA-KER-140, a Small Quarry in the Western Mojave Desert	Archaeological, Excavation	Outside	

TABLE 4.5-1 2017 CULTURAL RESOURCE RECORD SEARCH STUDIES WITHIN ½-MILE OF THE PROJECT AREA

Report	Author/o	Veer	Tiale	Type of	Proximity
Number KE-02191	Author(s) Bissell, R.M.	Year 1998	Title Cultural Resource Reconnaissance	Study/Comments Archaeological, Field	to Site* Outside
	·		of Sewer and Power Line Route Near California City, Kern County, California	Study	
KE-02319	Pritchard P., M.A., H. Wells, and H.R. Puckett	1999	Phase II Cultural Resources Evaluation of a Portion of CA-KER- 5532, California City, Kern County, California	Architectural/Historical, Evaluation	Within
KE-02950	Getchell, B. and J. Atwood	2003	Cultural Resources Inventory of a 67 + Acre Property Proposed for the Development of a Mojave Unified School District High School in California City, Kern County, California	Archaeological, Field Study	Within
KE-03842	Orfila, R.S.	2007	Archaeological Survey for the Brittle Bush 12KV [Kilovolt], California City, California	Archaeological Survey	Outside
KE-04091	Orfila, R.S.	2011	Re: Archaeological Survey of Project Area for the Southern California Edison Company: New Pole Installation (#1615717E) and Capacitor Bank Replacement, California City, California (IO#314941, TD#472753 and 490374 and 490374: RSOC Consultant Work Authorization No. 95)	Archaeological, Field Study	Outside
KE-04093	Orfila, R.S.	2011	Archaeological Survey of Project Area for the Southern California Edison Company: New Pole Installation (#1615706E) and Capacitor Bank Replacement, California City, California (IO#314944, TD#4727780, RSOC Consultant Work Authorization No. 94)	Archaeological, Field Study	Outside
KE-04472	Honey, L.L.	2014	Phase I Cultural Resources Assessment for the Fremont Valley Preservation Project Proposed Transmission Line and Pipeline, Kern County and San Bernardino County, California Archaeological, Fie Study		Within
KE-04826	Murphy, P.B.	2008	Archaeological Survey Report Mendiburu Road Construction for Hacienda Boulevard to 96 th Street California City, California – CML 5399 (009)	Archaeological, Field Study	Within
**KE- 05070	Psomas	2018	Archaeological Investigations for Prehistoric Site CA-KER-2468 for the CoreCivic 35-Acre Project	Archaeological, Field Study	Outside

^{* -} includes the utility corridor alignment

Source: Psomas 2021.

^{**} Sourced from the 2020 Record Search conducted by Psomas

TABLE 4.5-2 2020 CULTURAL RESOURCE RECORD SEARCH STUDIES WITHIN 1-MILE OF THE PROJECT AREA

Report Number	Author(s)	Year	Title	Type of Study/Comments	Proximity to Site*
KE-02719	Lewis, Don	2002	Cultural Resource Assessment: Cingular Site VY-001-12	Archaeological, Field Study	Outside
KE-03796	Orfila, Rebecca S.	2007	RE: Archaeological Survey for the California City High School Project, Overall 12kV, Distribution Circuit, Kern County, California; DWO 6086-2362 6-2026	Archaeological, Field Study	Outside
KE-04423	Peterson, Cher	2013	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CLU4442 (California City Police Department), 21130 Hacienda Boulevard, California City, Kern County, California, CASPR No. 3551608149	Archaeological, Field Study	Outside
KE-04827	Murphy, Peggy B.	2008	Archaeological Survey Report Redwood Boulevard Construction from Neuralia Road to Hacienda Boulevard, California City, Kern County, California - CML 5399 (009)	Archaeological, Field Study	Outside
KE-04828	Murphy, Peggy B.	2008	Archaeological Survey Report Neuralia Road Construction from Redwood Boulevard to Great Circle Drivem California City, Kern County, California - STPL 5399 (012)	Archaeological, Field Study	Outside
Source: Psomas 2020					

TABLE 4.5-3 2017 RECORD SEARCH **CULTURAL RESOURCES WITHIN 1/2-MILE**

Primary Number	Site Number	Recorder	Year	Resource Type	Proximity to Site*
P-15-000140	CA-KER-0140	Shepard, B. H., and L. Winters	1951; 1989	Prehistoric: lithic scatter, trails, and habitation debris	Outside
P-15-001098	CA-KER-1089	Breece	1979	Prehistoric: lithic scatter	Outside
P-15-002468	CA-KER-2468	Peak, A. and L. Winter	1989; 1993	Prehistoric: lithic scatter	Outside
P-15-002960	CA-KER-2960	Murray, J. and S. Cunkelman	1990	Prehistoric: lithic scatter	Within
P-15-002961	CA-KER-2961	Murray, J. and S. Cunkelman	1990	Prehistoric: lithic scatter	Outside
P-15-007240	CA-KER-7240	Bissell, R.M.	1998	Prehistoric: lithic scatter	Outside
P-15-007424	CA-KER-7424	Winter, L.	1989	Prehistoric: lithic scatter	Outside
P-15-007426	CA-KER-7426	Winter, L.	1989	Prehistoric: lithic scatter	Outside
P-15-007431	CA-KER-7431	De Witt, W.H.	1990	Prehistoric: lithic scatter	Outside
P-15-008253	_	Jackson, L.	1968	Historic: Twenty-Mule Team Road – Historic road	Within
P-15-008691	_	Winter, L.	1989	Prehistoric isolate: debitage	Outside
P-15-008692	_	Gerry, R.	1993	Historic isolate: tobacco tin	Within
P-15-008693	_	Gerry, R.	1993	Prehistoric isolate: debitage (obsidian)	Within
P-15-008694	_	Gerry, R.	1993	Prehistoric isolate: debitage	Outside
P-15-008695	_	Gerry, R.	1993	Prehistoric isolate: debitage (obsidian)	Outside
P-15-008696	_	Gerry, R.	1993	Prehistoric isolate: debitage	Outside
P-15-008697	_	Gerry, R.	1993	Prehistoric isolate: debitage	Outside
* - includes the	utility corridor alignm	ent		_	

Source: Psomas 2021.

TABLE 4.5-4 2020 RECORD SEARCH CULTURAL RESOURCES WITHIN 1-MILE

Primary Number	Site Number	Recorder	Year	Resource Type	Proximity to Site*
P-15-018608	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018609	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018610	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018611	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018612	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018613	*	EDAW, Inc	2007	Historic Structure	Outside
P-15-018614	*	EDAW, Inc	2007	Historic Structure	Outside

* - Trinomial site number not assigned

Source: Psomas 2021.

Native American Sacred Lands File Review

An inquiry was made of the NAHC on June 21, 2017 and January 2, 2018 to request a review of the Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the project vicinity that are not documented on other databases. The NAHC responded on January 31, 2018 with negative results for the presence of Native American traditional sites/places within the project site or ½-mile buffer surrounding the site. The NAHC did note that the absence of archaeological features and Native American cultural resources does not preclude their existence at the subsurface level and recommended contacting the listed tribal groups and representatives that may have specific knowledge of Native American cultural resources not formally listed on any database. Native American tribes and individuals on the NAHC list were mailed an informational letter on March 5, 2018, requesting any information they might have regarding cultural resources in the area. Table 4.5-5 lists the Native American tribal contacts.

TABLE 4.5-5
NAHC TRIBAL REPRESENTATIVES CONTACT LIST

Tribal Organization	Ethnographic Affiliation	Contact(s)		
Big Pine Paiute Tribe of the Owens Valley	Paiute-Shoshone	Genevieve Jones; Danelle Gutierrez		
Kern Valley Indian Community	Tubatulabal; Kawaiisu	Robert Robinson; Julie Turner		
Kitanemuk & Yowlumne Teion Indians	Yowlumne; Kitanemuk	Delia Dominquez		
San Manuel Band of Mission Indians	Serrano	Lee Clauss; Lynn Valbuena		
Chumash Council of Bakersfield	Chumash	Julio Quair		
Santa Rosa Indian Community of the Santa Rosa Rancheria	Tache; Tachi; Yokut	Rueben Barrios Sr.		
Tejon Indian Tribe	Kitanemuk	Octavio Escobedo		
Tubatulabals of Kern Valley	Tutatulabal	Robert L. Gomez, Jr.		
Tule River Indian Tribe	Yokuts	Neil Pevron		
Wuksache Indian Tribe/Eshom Valley Band	Foothill Yokuts; Mono; Wuksache	Kenneth Woodrow		
Source: Psomas 2021.				

Responses to the March 5, 2018 letter were received from the San Manuel Band of Mission Indians (SMBMI) by email on March 7, 2018. The SMBMI stated that the Project site lies outside of their traditional use area boundaries, and as such, they will not be requesting consultation with the Lead Agency nor requesting to participate in the scoping, development, and/or review of documents created pursuant to the legal and regulatory mandates.

Archaeological Field Survey

An archaeological field survey of the 215-acre site and off-site utility corridor alignment was conducted from May 19 through and May 30, 2017. The entire project area was surveyed by walking evenly spaced transects spaced no more than 10 meters (32 feet) apart. Areas considered highly sensitive for cultural resources and the ground surface were surveyed for the presence of the following:

- Prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools);
- Historic artifacts (e.g., metal, glass, ceramics);

- Sediment discoloration that might indicate the presence of a cultural midden; and
- Depressions and other features indicative of the former presence of structures or buildings (e.g., post holes, foundations).

The field survey resulted in negative results for newly identified cultural resources. Also, three of the previously recorded resources on the site and utility corridor alignment (P-15-002960, P-15-008692, and P-15-008693) were not re-located during the survey. Only Twenty Mule Team Parkway (P-15-008253) was found/re-located.

4.5.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Cultural Resources if it would:

Threshold 4.5a: Cause a substantial adverse change to the significance of a historical

resource pursuant to CEQA Guidelines Section 15064.5.

Threshold 4.5b: Cause a substantial adverse change to the significance of an

archaeological resource as defined in CEQA Guidelines Section 15064.5.

Threshold 4.5c: Disturb any human remains, including those interred outside formal

cemeteries.

Section 15064.5 of the State CEQA Guidelines provides significance criteria for historical and unique archaeological resources. Historical resources are defined as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (PRC 5024.1; 14 CCR 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript that a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the Lead Agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the Lead Agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC 5024.1; 14 CCR 4852), including if the project:
 - (a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (b) Is associated with the lives of persons important in our past;

- (c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (d) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in an historical resources survey does not preclude a Lead Agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Impacts to cultural resources are considered significant if the project would (1) physically destroy or damage all or part of a resource; (2) change the character of the use of the resource or physical feature within the setting of the resource which contributes to its significance; or (3) introduce visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

4.5.4 REGULATORY REQUIREMENT

RR CUL-1

The California Health & Safety Code Section 7050.5 and federal regulations (Archaeological Resources Protection Act [ARPA] 16 USC 470 & 43 CFR 7, Native American Graves Protection & Repatriation Act [NAGPRA] 25 USC 3001 & 43 CFR 10 and Public Lands, Interior 43 CFR 8365.1-7) establish defined protocols if human remains are discovered in the state of California regardless if the remains are modern or archaeological in origin. In the event of the discovery of human remains, all work in the area must cease immediately, nothing shall be disturbed and the area shall be secured. The County Coroner's Office of the county where the remains were located must be called. The Coroner has two working days to examine the remains, in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner's Office determines the remains are of modern origin, the appropriate law enforcement officials shall be called by the Coroner to conduct the required procedures. Work shall not resume until law enforcement has released the area.

On federal lands, if the Coroner determines the remains are archaeological or historic in origin, the federal agency archaeologist shall be notified. The archaeologist shall initiate the proper procedures under ARPA and/or NAGPRA. If the remains can be determined to be Native American, the steps as outlined in NAGPRA, 43 CFR 10.6 *Inadvertent Discoveries*, shall be followed.

On non-federal lands, if the Coroner determines the remains are archaeological or historic in origin, the Coroner shall make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American he/she shall contact by telephone within 24 hours, the California Native American Heritage Commission (NAHC). The NAHC shall immediately notify the person it believes to be the most likely descendant of the remains (MLD), as required by Section 5097.98 of the California Public Resources Code. The MLD has 48 hours to make recommendations to the land owner for treatment or disposition of the human remains. If the MLD does not make recommendations within 48 hours, the land owner shall rebury the remains in an area of the property secure from further disturbance. If the land owner does

not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

4.5.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.5a: Would the project cause a substantial adverse change to the

significance of a historical resource pursuant to in CEQA Guidelines

Section 15064.5?

On-site Impacts

The Project site is undeveloped; there are no structures or site improvements that may be considered historical resources that would be disturbed or demolished by the Project. The site is not listed in the NRHP, CRHR, or other local register as a historical site. Therefore, no impacts based on Threshold 4.5a would occur on-site with the Project.

Off-site Impacts

The locations of the proposed access road, the City's Phase 1 booster pump station (BPS) and wastewater treatment plant (WWTP) are not considered historical resources or sites. While Twenty Mule Team Parkway is considered a historic road for its use by the Twenty-Mule Team wagons, the proposed utility lines on this road would be placed underground and would not change the alignment of the road. Any at-grade manholes or aboveground utility boxes would be similar to those currently present along this road. Thus, the proposed utility infrastructure along Twenty Mule Team Parkway would not physically destroy or damage the road; would not change the characteristics or use of the road; and would not introduce elements that would diminish the integrity of the road.

The off-site gas line on California City Boulevard would be installed underground to connect with existing subsurface structures. The 2020 record search identified 7 historic structures located off Neuralia Road and California City Boulevard. However, construction will be contained to California City Boulevard and the underground gas line will only require trenching within existing public road rights-of-way to connect with existing subsurface structures. Therefore, off-site impacts based on Threshold 4.5a would be less than significant and no mitigation is required.

Threshold 4.5b: Would the project cause a substantial adverse change to the

significance of an archaeological resource as defined in CEQA

Guidelines Section 15064.5?

Short-Term Construction Impacts

No archaeological resources were discovered either on site or along the offsite utility corridor alignment as a result of the archaeological field survey. However, several prehistoric archaeological sites were recorded on or near the project area. Thus, there is a possibility that historical and/or archaeological materials would be uncovered during necessary subsurface excavations for construction of the proposed Project. MM CUL-1 calls for a qualified Archaeologist to monitor earth-moving activities during construction and sets procedures to follow in the event of the discovery of archaeological resources. Implementation of MM CUL-1 would reduce the potential for the destruction of any significant archaeological resources. Impacts would be less than significant after mitigation.

Long-Term Operational Impacts

Operation of the Project and use of off-site utility infrastructure and public facilities would not involve grading and excavation that may lead to the discovery of archaeological resources. No impact would occur.

Threshold 4.5c: Would the project disturb any human remains, including those interred outside formal cemeteries?

Short-Term Construction Impacts

There is no indication that human remains are present within the Project site and utility corridor alignment. The records search and field survey indicate no evidence of human remains on or near the site or associated off-site utility corridor alignment. Project-related earth disturbance, however, may unearth previously undiscovered human remains.

In compliance with State and federal regulations, if human remains are encountered during excavation activities, all work shall halt at the site and or any nearby areas reasonably suspected to overlie adjacent remains, and the County Coroner shall be notified (RR CUL-1). The Coroner shall determine whether the remains are of forensic interest within two working days of receiving notification. If the Coroner, with the aid of the qualified Archaeologist, determines that the remains are prehistoric and the find is on federal land, the Coroner shall notify the field archaeologist of the appropriate federal agency for the proper treatment and/or disposition of the remains. If the find is on non-federal lands, the Coroner shall contact the NAHC within 24 hours of the determination. The NAHC shall be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the *California Public Resources Code*. Compliance with RR CUL-1 would ensure that impacts on human remains would be less than significant. No mitigation is required.

Long-Term Operational Impacts

Operation of the Project and use of the off-site utility infrastructure and public facilities would not involve grading and excavation that may lead to the discovery of buried human remains. No impact would occur.

4.5.6 CUMULATIVE IMPACTS

Future growth and development in California City and the western Mojave Desert, including construction of the Project and other cumulative developments, would lead to ground disturbance, which may affect in situ cultural resources in the Project area. Due to the site-specific nature of cultural resources, it is difficult to determine if significant cumulative impacts to cultural resources would occur on individual development sites. Development on sites with native soils and where no previous developments have occurred has the potential to yield archaeological resources. The extent or significance of these resources cannot be determined until they are discovered during surveys and subsequently evaluated upon excavation of native soils.

Cultural resources site surveys that are conducted prior to development would facilitate early identification of on-site cultural resources and the preservation of significant resources. Compliance with Section 15064.5 of the State CEQA Guidelines to determine if there are important cultural resources on individual development sites would prevent cumulative impacts on cultural resources. Also, implementation of project-specific mitigation as part of individual projects and cultural resource studies would avoid significant cumulative impacts.

Implementation of MM CUL-1 would reduce potential direct impacts to archaeological resources to less than significant levels and would reduce the Project's contribution to significant cumulative adverse impacts to less than significant levels. Compliance with RR CUL-1 by the Project and other proposed/planned developments, as it pertains to the disposition of human remains that are discovered during excavation or grading, would prevent significant impacts, and potential impacts on human remains would not be cumulatively considerable.

The Project would not affect a historical resource or site. Other development projects in the City that have the potential to affect historic resources would be subject to evaluation in compliance with applicable regulations, including Section 5024.1 of the PRC, Sections 21083.2 and 21084.1 of CEQA, Section 15064.5 of the State CEQA Guidelines; Section 106 of the NHPA (16 *United States Code* [USC] Section 470f); and the CRHR, which was established in 1992 through Sections 5020 et seq. of the PRC. Because there are no Project-related significant impacts to historic resources that would require mitigation and because individual development projects would need to consider and mitigate for any impacts to historic resources in compliance with applicable regulations, impacts would not be cumulatively considerable.

4.5.7 MITIGATION MEASURES

MM CUL-1

The Project Applicant/Developer shall retain a professional archaeologist prior to the issuance of grading permits. The task of the archaeologist shall be to monitor the initial ground-altering activities at the site and off-site utility corridor alignment for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of California City and no grading activities shall occur at the site or within the off-site utility corridor alignment until the archaeologist has been approved by the City. The archaeological monitor shall be responsible for maintaining daily field notes and a photographic record, and for reporting all finds to the Developer and the City in a timely manner. The archaeologist shall be equipped to record and salvage cultural resources that may be unearthed during grading activities. The archaeologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.

In the event that archaeological resources are discovered at the Project site or within the off-site utility corridor alignment, the handling of the discovered resources shall depend on the integrity of the discovery and the type of resources (e.g. cultural middens, intact features, isolated artifacts) discovered. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred/ceremonial objects, belong to the property owner. All artifacts discovered shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project archaeologist shall notify the property owner, the City, and tribes identified by the California Native American Heritage Commission (NAHC) as being affiliated with the area. A designated Native American observer from one of the tribes identified by the NAHC as being affiliated with the area shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of Section 106 and CEQA and shall consider the religious beliefs, customs, and practices of the affiliated tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.

Native American artifacts that are relocated/ reburied at the Project site would be subject to a fully executed relocation/reburial agreement with the assisting Native American tribes or bands. This shall include measures and provisions to protect the reburial area from any future impacts. Relocation/reburial shall not occur until all cataloging and basic recordation have been completed. Native American artifacts that cannot be avoided or relocated at the project site shall be prepared in a manner for curation at an accredited curation facility in Kern County that meets federal standards per 36 CFR Part 79 and makes the artifacts available to other archaeologists/researchers for further study, such as the Buena Vista Museum of Natural History and Science. The archaeologist shall deliver the Native American artifacts, including title, to the accredited curation facility within a reasonable amount of time, along with the fees necessary for permanent curation.

Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts shall be subjected to curation or returned to the property owner, as deemed appropriate.

Once grading activities have ceased or the archaeologist, in consultation with the City, determines that monitoring is no longer necessary, monitoring activities can be discontinued following notification to the City. A report of findings, including an itemized inventory of recovered artifacts, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report shall provide evidence that any Native American and Non-Native American archaeological resources recovered during project development have been avoided, reburied, or curated at an accredited curation facility. A copy of the report shall also be filed with the SSJVIC.

4.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of MM CUL-1, impacts to archaeological resulting from implementation of the Project would be reduced to a less than significant level. No significant unavoidable direct, indirect, or cumulative impacts to cultural resources would occur.

4.5.9 REFERENCES

Psomas. 2021 (May). Phase I Cultural Resources Inventory for the Correctional Development Facility at California City. Pasadena, CA: Psomas.

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4.6 ENERGY

This section evaluates the potential for energy-related impacts associated with the Project and ways in which the Project would reduce unnecessary energy consumption, consistent with the suggestions contained in Appendix F of the California Environmental Quality Act (CEQA) Guidelines. Energy service providers to the site include Southern California Edison Company (SCE) for electrical service and Southern California Gas Company (SoCalGas) for natural gas. Information for this Environmental Impact Report (EIR) section was derived from responses to the Notice of Preparation (Appendix A); consultation with the various utility providers (Appendix G) and the websites of these providers.

4.6.1 RELEVANT PROGRAMS AND REGULATIONS

This section includes relevant federal, State, and local programs and regulations that apply to Energy. In addition to those discussed below, the following relevant programs and regulations from Section 4.7, Greenhouse Gas Emissions, are applicable to the Energy discussion: Light-Duty Vehicle Greenhouse Gas (GHG) Emissions Standards and Corporate Average Fuel Economy Standards; the California Air Resources Board (CARB) Scoping Plan; the California Code of Regulations (Title 24, Part 6, Energy Efficiency Standards and Title 24, Part 11, Green Building Standards Code); and the California City Building Code (Title 8 of the City's Municipal Code).

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The Act sets increased Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration.

State

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill (SB) 1078 and was amended in 2006, 2011, and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020, 60 percent by 2030, and 100 percent by 2045. The California Public Utilities Commission (CPUC) is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State of California (State). In 2018, the three largest retail energy utilities provided an average of 37 percent of their supplies from renewable energy sources, during which the requirement was 33 percent (CPUC 2020).

State Alternative Fuels Plan

Assembly Bill (AB) 1007 requires the California Energy Commission (CEC) to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with CARB and in consultation with other federal, State, and local agencies to reduce petroleum consumption; increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen); reduce GHG emissions; and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels; result in significant improvements in the energy efficiency of vehicles; and reduce trips and vehicle miles traveled (VMT) through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CEC 2007).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (*California Code of Regulations* [CCR], Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, wine chillers, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy efficiency technologies and methods.

Title 24, Part 6, Energy Efficiency Standards for Residential and Nonresidential Buildings

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the *California Code of Regulations* [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020". The current applicable standards are the 2019 Standards, effective January 1, 2020 (CEC 2020a). Analysis by the California Energy Commission concludes that the 2019 energy efficiency standards, which took effect January 1, 2020, are projected to result in a 30 percent improvement in energy efficiency for nonresidential buildings over the 2016 standards (CEC 2020b).

Title 24, Part 11, Green Building Standards

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality (CBSC 2020). In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for

design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others.

City

Municipal Code CalGreen Code

Title 8 of the City Municipal Code, which is the City Building Code, incorporates (and adopts by reference) the most current edition of the California Building Code (CBC). Part 11 of the CBC is the California Green Building Standards Code (CalGreen Code).

General Plan

The following California City General Plan policies are set forth to promote energy conservation:

Open Space and Conservation Element:

- Encourage development designs that promote energy conservation and that minimize the direct and indirect emissions of air contaminants.
- Bicycle lanes shall be developed along with other City improvements to encourage alternative methods of transportation.
- Promote energy conservation measures contained in Title 24 of the California Code of Regulations.
- Promote a logical extension of development to utilize existing infrastructure and conserve resources.
- Encourage energy conservation in both the private and public sectors by promoting utility company incentive programs for both new development and retrofitting of existing structures.

The following implementation measures are set forth in the California City General Plan Open Space and Conservation Element addressing energy efficiency and energy conservation:

- C-7. The flowing measures shall be incorporated into new development proposals, as applicable, to address the energy efficiency goals and policies in the General Plan. Verification of these measures shall occur during development review and building inspection:
 - Solar or low emission water heaters shall be encouraged in all residential and commercial projects to reduce natural gas consumption and emissions. All restaurants with charbroilers shall have PM 10 /ROG emissions control systems.
 - Development, including commercial and industrial development, shall provide sidewalks and onsite pedestrian facilities to encourage non-vehicular employee, customer, and resident trips.

- C-9. The City shall promote energy conservation in the General Plan Planning Area through the following measures:
 - Review construction plans prior to the issuance of building permits to ensure that energy efficiency requirements of Title 24 of the California Administrative Code are met.
 - Encourage energy conservation programs in both the private and public projects.

4.6.2 EXISTING CONDITIONS

The Project area is served by SCE for electrical power services and SoCalGas for natural gas services. There is no utility infrastructure on the site that provides electrical power or natural gas distribution systems. A 33-kilovolt underground electrical power line is present on Virginia Boulevard, but ends approximately 320 feet north of Gordon Boulevard on the east side of Virginia Boulevard. The power line on Virginia Boulevard ties to the power lines on Twenty Mule Team Parkway.

SoCalGas has no gas lines or regulator stations near the Project site. The nearest gas pumping station is located at the intersection of Yerba Boulevard and California City Boulevard, at the western section of the City's central core.

There is no electrical energy or natural gas usage at the Project site since it is undeveloped. There is also no transportation energy use at the site.

4.6.3 THRESHOLDS OF SIGNIFICANCE

Potential impacts on Energy would occur if a project would:

Threshold 4.6a: Result in potentially significant environmental impact due to wasteful,

inefficient, or unnecessary consumption of energy resources, during

project construction or operation?

Threshold 4.6b: Conflict with or obstruct a state or local plan for renewable energy or energy

efficiency?

4.6.4 REGULATORY REQUIREMENTS

The following Regulatory Requirements also apply to the Energy analysis: RR AIR-2, RR AIR-3 from Section 4.3, Air Quality; RR GHG-1 from Section 4.8, Greenhouse Gas Emissions; and RR UTL-1 and RR UTL-3 from Section 4.18, Utilities and Service Systems.

4.6.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.6a: Would the project result in potentially significant environmental

impact due to wasteful, inefficient, or unnecessary consumption of

energy resources, during project construction or operation?

Short-Term Construction Impacts

Construction energy use could be considered wasteful, inefficient, or unnecessary if construction equipment is old or not well maintained, such that its energy efficiency is lower than newer equipment; if equipment is left or to idle even when not in use; if construction trips utilize longer routes than necessary; or if excess electricity and water (which would indirectly require the use of

energy for the extraction, treatment and conveyance of water) is used during construction activities. Construction of the Project would create temporary increased demands for electricity and vehicle fuels and would result in short-term transportation energy use necessary for development of the Project.

Electrical power use to run equipment during construction would be required. Although the majority of construction equipment during grading activities would be gas-powered or diesel-powered, later construction activities (including interior construction and architectural coatings) would require electricity. The electrical usage during construction would fluctuate as the construction activities change and the Project progresses towards completion. The site is not currently served by on-site electrical infrastructure, but connection to the existing electrical power line on Virginia Boulevard would be made and electrical power would be used during construction activities. The demand for electricity during construction would not require the development of new or expanded electrical infrastructure since the use would be temporary and relatively minor. Impacts on energy resources during construction would be less than significant.

No natural gas demand is expected during construction as no natural-gas construction equipment or vehicles are expected to be used.

Transportation energy use depends on the type and number of construction equipment and vehicle trips; VMT; fuel efficiency of vehicles and equipment; and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary (i.e., for approximately 42 months). Construction is expected to involve use of 163,423 gallons of diesel fuel and 164,040 gallons of gasoline, as shown below in Table 4.6-1.

TABLE 4.6-1
CONSTRUCTION-RELATED ENERGY USE

Source	Diesel Fuel (gallons)	Gasoline (gallons)	
Off-road Construction Equipment	129,980	75,119	
Worker Commute	452	79,268	
Vendors	4	175	
On-road Haul	27,961	29	
Totals	158,397	154,592	

As discussed in Section 4.3, Air Quality, pursuant to the *California Code of Regulations* (specifically, Title 13, Section 2485 - see RR AIR-3), all diesel-fueled commercial motor vehicles must not idle for more than 5 consecutive minutes at any location. Implementation of RR AIR-3 would reduce fuel use by construction vehicles and equipment. The Project also proposes balanced grading to avoid the need to import or export soils to and from the site. As discussed in Section 4.18, Utilities and Service Systems, RR UTL-3 requires the recycling/reuse of at least 65 percent of non-hazardous construction/demolition debris by weight or volume, in accordance with the City's Municipal Code and the CalGreen Code. This RR would indirectly reduce energy use from the production of building materials and the transport/disposal of solid wastes.

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. The Project also would require construction equipment

to be properly maintained and to minimize idling. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than comparable equipment at construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards, as detailed in California's Title 24 building standards. Consequently, there would be less than significant impacts and no mitigation is required.

Long-Term Operational Impacts

Long-term energy use would be considered wasteful if alternative energy sources are not used when they are feasible/available and would be considered inefficient if construction techniques and materials are not compliant with building code requirements for energy efficiency. Operation of the Project would create demands for electricity and natural gas at the site and would result in increased transportation energy use. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, security and control center functions, use of on-site equipment and appliances; and indoor, outdoor, perimeter, and parking lot lighting.

CoreCivic estimates that the proposed Project would use 39,456 kilowatt-hours (kWh) of electrical power per day or approximately 14.4 million kWh annually. SCE delivered a total of 87 billion kWH in 2015, which included 18 billion kWh of renewable energy (SCE 2018). The Project's electrical power demand would represent less than 0.02 percent of SCE's power supply in 2015 and would not, therefore, create a significant effect on either peak or base load energy demands from SCE. Electrical service to the Project would be provided by SCE through connections to existing off-site electrical lines located on Virginia Boulevard. Consultation with SCE has not raised any issues related to service or availability of energy supplies.

CoreCivic estimates that the proposed Project would use approximately 48 billion British thermal units (Btu) of natural gas per year SoCalGas' natural gas supplies are purchased from suppliers and marketers. In 2015, SoCalGas had a total of 102 billion cubic feet (Bcf) of storage capacity (CCST 2018). The Project's natural gas demand is equal to 0.47 Bcf or less than 0.05 percent of SoCalGas' storage capacity for its natural gas supplies and would not, therefore, create a significant effect on either peak or base load energy demand. Natural gas service to the Project would be provided by SoCalGas through the extension of a natural gas line on California City Boulevard, Twenty Mule Team Parkway, 145th Street, Gordon Boulevard and into the site.

RR GHG-1 requires incorporation of energy conservation measures in compliance with the CalGreen Code for the proposed Project. This would reduce demand for energy from SCE and SoCalGas.

While additional energy supplies are needed from SCE and SoCalGas, the Project's electrical and natural gas demands would represent minor amounts of each utility company's total supplies; the proposed Project would require the development of new energy sources which would provide sufficient capacity for the Project as well as anticipated unrelated development within the City. The physical impacts resulting from the installation of on-site and off-site electrical power and natural gas lines and connections are within the defined Project impact area and are evaluated throughout this EIR as part of the proposed Project.

Transportation energy use during Project operations would come from the use of motor vehicles for staff vehicle trips; inmate transport to and from the Project; delivery/supply trucks; inmate visitors (e.g., lawyers, family members, and friends); volunteers; and trips by maintenance and repair crews. The Traffic Impact Study estimates that the Project would generate approximately 1,216 trips on weekdays and 1,616 trips during the weekends.

The transportation energy use from these vehicle trips would depend on the efficiency of the motor vehicles in use, including the average miles-per-gallon achieved by a particular type of vehicle. The types of vehicles and their associated fuel economy that would be used by staff, visitors, and others were based on countywide averages occurring for each vehicle type. Estimated trip lengths for vehicles that would come to and from the Project are based on the estimated origin and destination of each trip type.

Estimates of energy use during Project operations are provided in Table 4.6-2, Estimated Annual Energy Use. Electrical and natural gas consumption are based on CoreCivic estimates. Transportation energy use assumes a total of 1,200 staff vehicle trips per day, 200 daily visitor trips per day on the weekends, 12 daily truck delivery trips, and 4 inmate transport trips.

Due to the remote location of the site, vehicle travel would generally originate from the nearest urban centers and populated communities. Employees of the Project are expected to live in the surrounding areas and trips would be made to and from their places of residence. As estimated in the Section 4.1, Population and Housing, as many as 15 percent of employees could relocate into California City's central core (approximately 6.5 miles to the southwest). Other employees may come from the cities of Bakersfield, Lancaster, Palmdale, Santa Clarita, and Victorville, as well as smaller communities. Deliveries of supplies to the Project are expected to come from the City of Bakersfield and the counties of Los Angeles and San Bernardino. Visitors to the proposed correctional facility would include some inmate family households who would potentially relocate to the City but the majority of visitors are expected to travel to the site from urban centers in the Bakersfield, Los Angeles, and San Bernardino areas or even more distant locations. Travel from the more distant locations may include use of airports.

Data from the CalEEMod that is used in air quality and greenhouse gas modelling shows a total of 22,577,491 VMT would be generated by the Project.

TABLE 4.6-2 ESTIMATED ANNUAL ENERGY USE

	Annual Energy Consumption
On-site electric power use	14.4 million kWh
On-site natural gas use	48 billion Btu per year
Vehicle trips - gasoline	662,972 gallons
Vehicle trips - diesel fuel	335,498 gallons
	<u> </u>

Btu: British thermal units

Notes:

Energy use figures are rough estimates and actual energy use may vary.

Gasoline use is based on average daily trips.

- assumes 1 kilowatt-hour = 3,412 Btu
- b average fuel economy in 2015, based on ORNL 2016.
- assumes 1 gallon of gasoline = 120,476 Btu
- d assumes 1 gallon of diesel fuel = 137,452 Btu

Source: USEIA 2018 (conversion factors).

Development of buildings that comply with the latest energy efficiency standards adopted by the State California would not result in inefficient, wasteful and unnecessary consumption of energy. Energy associated with vehicular trips are also not considered inefficient, wasteful and unnecessary because the proposed Project would support the State of California's SB 105 which authorized additional capacity measures. Impacts would be less than significant and no mitigation is required.

Off-Site Impacts

The proposed access road, off-site infrastructure improvements and public facility upgrades would have minor energy demands from the use of construction equipment and construction trips, and would have no energy demands (i.e., no off-site land uses) for long-term operation, except for the new pump at the Phase 1 booster pumping station and new equipment at the City's wastewater treatment plant. The increases in energy consumption related to offsite improvements are necessary to support planned developments within the City and energy related demand would be compliant with the State's energy efficiency requirements and impacts related to increase energy use at these facilities would be less than significant and no mitigation is required.

Threshold 4.6b: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Short-Term Construction Impacts

As discussed in Section 4.3, Air Quality, RR AIR-3 requires that diesel-fueled commercial motor vehicles must not idle for more than five consecutive minutes at any location.

Construction traffic is expected to use Virginia Boulevard and Twenty Mule Team Parkway to access State Route (SR) 14 and SR 58 and US 395, which are the most direct and shortest routes from the site to the regional freeway system. Electrical energy would be available for use during construction from existing SCE power lines and service connection at Virginia Boulevard, avoiding the use of generators that are less efficient than tying into SCE infrastructure. No natural gas use would be needed during construction.

Recycling of construction wastes (see RR UTL-3) would indirectly reduce energy use by future construction projects. As mentioned previously, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than comparable equipment at construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards, as detailed in California's Title 24 building standards. Thus, energy use during construction of the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant and no mitigation is required.

Long-Term Operational Impacts

As shown in Table 4.6-2 above, the Project would use an estimated 14.4 million kilowatt-hours (kWh) of electrical power per year and an estimated 48 billion Btu of natural gas per year. A portion of this energy demand would be met by the renewable energy sources, California's RPS requires investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources. In 2016, 28 percent of SCE's electrical energy sources were renewable energy resources. In 2020, the RPS requires a 33 percent renewable portfolio and a 60 percent procurement is required by 2030. Thus, it is expected that some of the electricity provided to the Project would come from renewable sources.

The regulations, plans, and polices adopted for the purpose of maximizing energy efficiency that are directly applicable to the Project include California's Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and Title 24 California Green Building Standards Code (CalGreen Code) (RR GHG-1). The Project would be consistent with the requirements of these energy-related regulations, as per RR GHG-1, as discussed in Section 4.7, Greenhouse Gas

Emissions. Compliance with RR UTL-1 on the implementation of solid waste reduction and recycling measures (e.g., paper, cardboard, plastic, and glass segregation and recycling) as part of Project operations would also indirectly reduce energy demands.

Impacts would be less than significant and no mitigation is required.

4.6.6 CUMULATIVE IMPACTS

Electrical power and natural gas services would be provided by SCE and SoCalGas on demand, consistent with CPUC requirements. The federal and State governments have enacted legislation to improve energy efficiency in vehicles, equipment, and appliances; to reduce VMT; and to develop alternative fuels or energy sources. Utility companies are also increasing their renewable energy sources to meet the RPS mandate of 33 percent renewable supplies by 2020 and 60 percent by 2030.

On-site energy use would be reduced through compliance with Title 24 and the CalGreen Code (as adopted by the City into Title 8 of the Municipal Code) (RR GHG-1), and other energy conservation programs and policies. Cumulative development in the City and the surrounding area would also comply with the same regulations, such as the CalGreen Code, which has been adopted by the City into Title 8 of the California City Municipal Code and into Chapter 17.10.020 of the Kern County Code.

Transportation energy use would increase with the Project and cumulative development in the area. However, this transportation energy use would not represent a major amount of energy use in the City, the County of Kern, or the region, when compared to the amount of existing development and the total number of vehicle trips and VMT throughout the County and the region. Improved fuel economy in newer vehicles and alternative fuel vehicles are also expected to reduce future transportation energy use.

As older appliances, equipment, and vehicles are replaced with newer ones, total energy use in buildings is expected to decrease over time. Thus, energy use from the proposed Project and cumulative developments would not represent a substantial demand for energy and would not be considered inefficient, wasteful, or unnecessary. Cumulative impacts would be less than significant; Project impacts would not be cumulatively considerable; and no mitigation is required.

4.6.7 MITIGATION MEASURES

There would be no significant impacts related to Energy and no mitigation is required.

4.6.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts on Energy would be less than significant and no mitigation is required.

4.6.9 REFERENCES

- California Building Standards Commission (CBSC). 2020 (March 27, access date). California Building Standards Code (California Code of Regulations Title 24. Sacramento, CA: CBSC. https://www.dgs.ca.gov/BSC/Codes.
- California Council on Science and Technology (CCST). 2018. Long-Term Viability of Underground Natural Gas Storage in California. Sacramento, CA: CCST. http://ccst.us/projects/natural gas storage/publications.php
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4.7 GEOLOGY AND SOIL

This section analyzes the potential impacts of the proposed Correctional Facility at California City (CFCC) (also referred to as the proposed Project or Project), as it relates to geology, seismicity and soils. Information on the geologic and seismic characteristics of the site and surrounding area is derived from the *Preliminary Geotechnical Summary Report for the proposed Correctional Facility in California City* prepared by Leighton Consulting in May 2017 (included as Appendix F of this Environmental Impact Report [EIR]), the *Geotechnical Investigation Report for the Proposed Prison Facility, California City, Kern County, California* prepared by Rust Environment & Infrastructure in January 1998 (RUST 1988) for the existing California City Correctional Center (CCCC), the California City General Plan (California City 2009), and online resources of the California Geological Survey.

4.7.1 RELEVANT PROGRAMS AND REGULATIONS

State

Alquist-Priolo Earthquake Fault Zoning Act

In response to the 1971 San Fernando Earthquake in Southern California, the Alquist-Priolo Special Studies Zones Act of 1972 was enacted. The Act was renamed in 1994 to the Alquist-Priolo Earthquake Fault Zoning (APEFZ) Act. Under this Act, Earthquake Fault-Rupture Zones have been delineated along the traces of active faults to prevent the construction of structures for human occupancy across these earthquake faults. The boundary of the fault zone is approximately 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The State Geologist defines an active fault as a fault that has previous surface displacement within the Holocene period (i.e., within the last 11,000 years). A potentially active fault is defined as any fault that has surface displacement during Quaternary time (i.e., within the last 1,600,000 years), but not within the Holocene period.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (*California Public Resources Code*, Sections 2690–2699.6) directs the California Department of Conservation to identify and map areas subject to earthquake hazards, such as liquefaction, earthquake-induced landslides, and amplified ground shaking. However, Seismic Hazard Zone maps have not yet been developed for the County of Kern.

California Building Code

The California Building Code (CBC) is promulgated under the California Code of Regulations (CCR, Title 24, Parts 1 through 12), with the California Building Standards Commission (CBSC) responsible for administering CBC, including the adoption, approval, publishing, and implementation of the Code. The national model code or 2015 International Building Code (IBC) standards adopted into Title 24 apply to the design, construction, and maintenance of all buildings in California, except for modifications adopted by State agencies and local governing bodies. The 2016 CBC is the current code and became effective on January 1, 2017.

The CBC requires the preparation of engineering geologic reports, supplemental ground-response reports, and/or geotechnical reports for all new construction; new structures on existing sites; and alterations to existing buildings. It also includes seismic design criteria and requirements for use in the structural design of buildings (i.e., based on seismic hazard maps and

the seismic design category) and specifies building components that require special seismic certification.

City

California City Building Code

The City of California City Building Code (City Building Code) is promulgated under Title 8 of the City Municipal Code. The City Building Code incorporates (and adopts by reference) the most current edition of the CBC, which, in turn, incorporates the 2015 IBC. Section 8-1.01 of Title 8 (Chapter 1) of the City Building Code states that, "The most current edition, nor or in the future published, of the Code designated as the "Uniform Building Code," adopted by the California Building Standards Commission, together with its Appendices is adopted to protect the public health and safety, requiring permits, and regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, use, height, and maintenance of structures and certain equipment". Additionally, Section 8-1.03 of the City Building Code states that except where the City Building Code prescribes more stringent standards, Chapter 2 Earthquake Protection of Part 3 of the California Health and Safety Code is referred to and incorporated as the minimum earthquake protection standards within the City. Section 4-1.101 of the Municipal Code also adopts by reference the California Fire Code.

4.7.2 EXISTING CONDITIONS

Paleoenvironment

The climate of the Mojave Desert region has varied considerably over the course of human occupation, alternating from cool and moist to hot and dry conditions. Climate reconstructions based on vegetation data for the period indicate that the late Pleistocene period was, on average, warmer than previous periods and colder and wetter than subsequent periods (Spaulding 1990). This period marked the end of the Wisconsin glaciation, commonly correlated with the end of the last Ice Age. During the Wisconsin glaciation, there were numerous glacial advances and retreats, with the last glacial maximum occurring approximately 18,000 years ago (Grayson 1993:46–47). After this time, glaciers began to wane, and the environment began to change rapidly.

Prior to the end of the late Pleistocene period, the Great Basin and a large portion of the Mojave Desert, including the western Mojave Desert were marked by numerous pluvial (precipitation-filled) lakes and pluvial lake systems, such as the nearby Roger's dry lakebed located on Edwards Air Force Base. Precipitation was higher and temperatures were lower, leading to a ratio of precipitation/evaporation that allowed these lake systems to develop. In addition, vegetation later characteristic of only higher elevations (e.g., juniper or Piñon-juniper woodlands) and shrubs (e.g., Mormon tea, rabbitbrush, and shadscale) were found at much lower elevations, occurring throughout much of the Mojave Desert (Grayson 1993:139–141). The late Pleistocene fauna was also significantly different, most notably because of the presence of megafauna. These very large mammals included herbivores such as mammoths, mastodons, horses, ground sloths, and camels, as well as predators like saber-toothed cats, American lions, and dire wolves. About 10,000 years ago, with the retreat of the glaciers and increasing temperatures, the pluvial lakes were nearly gone and the existing low-elevation plant communities were replaced by desert vegetation, and most late Pleistocene mammals had become, or were becoming, extinct.

Regional Geology

The Mojave Desert Geomorphic Province of southern California includes over 25,000 square miles of rugged mountains and valleys in southern Nevada, western Arizona, southwestern Utah, and southeastern California. This province is known as the High Desert and is located between the lower and hotter Sonoran desert to the south and the cooler and higher Great Basin Desert to the north. It is bound by the Tehachapi Mountains and Garlock Fault to the north and the San Gabriel and San Bernardino Mountains and the San Andreas Fault to the south.

The Project site is located in the western Mojave Desert, between the southern Sierra Nevada and the San Gabriel Mountains. This portion of the Mojave Desert includes high-relief mountains, small hills, volcanic domes, pediments, broad alluvial valleys, and dry lakes. This area is generally underlain by pre-Tertiary plutonic, metavolcanic, metasedimentary, and igneous rocks; Tertiary sedimentary and volcanic rocks; and Quaternary sediments (CDOC 2018a).

Soils

The Project site consists of a pediment that is partially mantled by surficial deposits and has a gentle to moderate slope to the southwest. Bedrock outcrops are present at the northern and northeastern portion of the site. The geologic map for the area indicates the site has Holoceneage alluvial sediments, which overlay pre-Tertiary granite and quartz monzonite bedrock (CDOC 2018b).

On-site ground elevations are approximately 2,550 feet above mean sea level (msl) at the southwestern corner of the site to approximately 2,670 feet above msl at the northeastern corner. On-site soils are expected to be similar to those found west of the site during past geotechnical investigations. The overlying alluvial soils consist of silty sands that are loose to medium dense and dry to moist. These soils are 1.5 feet to 10.5 feet thick but usually were about 4.0 feet thick. The underlying bedrock consists of granite that was highly weathered to weathered, with gravel-to boulder-sized rocks on its surface.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey identifies on-site soils as Muroc-Randsburg sandy loam (5 to 9 percent slopes) at the northern, western, and northwestern sections of the Project site (48.8 percent); Neuralia sandy loam (2 to 5 percent slopes) at the central and southwestern sections (36.0 percent); and Cajon Loamy sand (0 to 5 percent slopes) at the southeastern section (14.7 percent). The very northeastern corner of the site has Torriorthents-rock outcrop complex (very steep) (0.1 percent) and the southeastern corner has Muroc-Randsburg sandy loams (5 to 9 percent slopes) (0.4 percent). Aside from the rock outcrops, the soils on the site have a high wind erodibility but slight to moderate erosion hazards; have very limited soil absorption capacity; low soil expansion potential; and moderate to high potential for corrosion of steel (USDA 2018).

Seismicity

There is no designated Earthquake Fault Zone on or near the Project site. The nearest Alquist-Priolo Earthquake Fault Zones are associated with the Garlock Fault Zone, located approximately 12 miles to the north-northwest at the nearest points to the site; and the Lockhart Fault Zone, located approximately 6 miles to the east-northeast at the nearest points. There are several unnamed faults approximately 1.0 mile south of the site, which are Pre-Quaternary faults (before 1.6 million years) (Leighton 2017). Exhibit 4.7-1 provides a Fault Map that depicts known active and potentially active faults in the Project site vicinity.

Fault Map Exhibit 4.7-1

Correctional Facility at California City (CFCC)



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Paleontological Resources Record Search

A paleontological resources records search and scientific literature review for the Project site was conducted to identify deposits and formations where significant resources might be located. The records search was conducted by Samuel McLeod of the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (NHM) on February 16, 2017. The records search documents mapped formations, fossil localities, and references to publications regarding fossil resources previously identified within and adjacent to the Project site and off-site utility corridor alignment.

According to the records search and review, there are no vertebrate fossil localities within the site or utility corridor alignment. However, there are localities from the same sedimentary deposits that may occur on the Project site. The surficial deposits on the site consist entirely of younger Quaternary Alluvium. These sediments typically do not contain significant vertebrate fossils. However, a Pleistocene horse (*Equus* sp.) and camel (*Hemiauchenia* sp.) have been recorded in Quaternary Alluvium and Older Quaternary sediments nearby. The Project area is considered moderately sensitive for paleontological resources.

4.7.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Geology and Soils if it would:

Threshold 4.7a: Directly or indirectly cause potential substantial adverse effects, including

the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Hazard Fault Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (ii) strong seismic ground shaking; (iii) seismic-related ground failure, including liquefaction; or (iv) landslides.

Threshold 4.7b: Result in substantial soil erosion or the loss of topsoil.

Threshold 4.7c: Be located on a geologic unit or soil that is unstable, or that would become

unstable as a result of the project, and potentially result in on- or off-site

landslide, lateral spreading, subsidence, liquefaction or collapse.

Threshold 4.7d: Be located on expansive soil, as defined in Table 18-1-B of the Uniform

Building Code (1994), creating substantial direct or indirect risks to life or

property.

Threshold 4.7e: Have soils incapable of adequately supporting the use of septic tanks or

alternative wastewater disposal systems where sewers are not available

for the disposal of wastewater.

Threshold 4.7f: Directly or indirectly destroy a unique paleontological resource or site or

unique geologic feature.

4.7.4 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirements (RR):

RR GEO-1 The proposed Project will be designed and constructed in accordance with the California City Building Code, which adopts the California Building Code (CBC) by reference. New construction, alteration, or rehabilitation shall comply with applicable ordinances set forth by the City and/or by the most recent building and seismic codes in effect at the time of project design.

In accordance with Section 1803.1 et seq. of the 2016 CBC, a geotechnical investigation shall be conducted for the Project to determine the soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary and as determined by the City Building Official. Subsurface geotechnical exploration and laboratory testing shall be performed as part of the geotechnical investigation to develop site-specific geotechnical design recommendations for the Project. The geotechnical investigation must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations of the report, as they pertain to structural design and construction recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic considerations, must be incorporated into the design and construction of the Project.

RR GEO-3 In accordance with the California City Fire Code, the transportation, manufacture, storage, handling, sale or use of any quantity of explosives, explosive materials, and blasting agents shall be in accordance with pertinent provisions of California Fire Code, which the City Municipal Code adopts by reference.

4.7.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.7a:

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (ii) strong seismic ground shaking; (iii) seismic related ground failure, including liquefaction; or (iv) landslides?

Short-Term and Long-Term On-Site and Off-Site Impacts

Fault Rupture

The Preliminary Geotechnical Summary Report for the Project states that the Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and there are no active or potentially active faults that extend across or toward the Project site or the areas where off-site infrastructure improvements are proposed. Thus, the proposed Project and related infrastructure improvements would not be subject to hazards associated with ground rupture.

Strong Seismic Ground Shaking

In addition to the Garlock Fault Zone and the Lockhart Fault Zone, there are several other earthquake faults in the surrounding area. These include the El Paso, Rand Mountain, Cantil Valley, and Muroc Faults. An earthquake on any of these faults would result in ground shaking at the Project site, depending primarily on the earthquake magnitude, the distance from the source, and the site response characteristics. Peak horizontal ground accelerations were estimated using the United States Geological Survey (USGS) Seismic Design Maps at 0.428 g (where g is the acceleration due to gravity). This could lead to structural damage and failure in the event of an earthquake. Unnamed faults south of the site are not expected to cause earthquakes due to their age (over 1.6 million years).

The Project would have to be designed and constructed to minimize seismic hazards associated with intense ground shaking. Use of the seismic design parameters in the CBC for the structural design and construction of the Project (RR GEO-1) would prevent damage to proposed structures and infrastructure during a major earthquake and minimize hazards associated with ground shaking.

Seismic-Related Ground Failure, Including Liquefaction and Landslides

Liquefaction is the loss of soil strength or stiffness due to a buildup of excess pore-water pressure during strong ground shaking. Liquefaction is associated primarily with low density, granular, saturated soil. Effects of severe liquefaction can include sand boils, excessive settlement, bearing capacity failures, and lateral spreading, which can result in damage to foundations and settlement of aboveground structures; and, in some cases, can uplift buried structures (e.g., pipelines).

The State Water Resources Control Board's Groundwater Information System database indicates that the depth to groundwater from a well located approximately 4.0 miles southeast of the site was measured at 455.5 feet below the ground surface in September 2010. Groundwater was not encountered during soil borings up to 75 feet deep at the site of the adjacent California City Correctional Center (CCCC). Given that bedrock is found at very shallow depths and groundwater is not expected within 50 feet below the ground surface at the site, liquefaction hazards are considered remote and would not affect the proposed Project. Similarly, proposed utility infrastructure and facility upgrades would be located in relatively flat areas and in areas where there are no known liquefaction hazards. As required under the CBC, a geotechnical investigation would have to be prepared to determine site-specific soil characteristics. Compliance with the recommendations of the Geotechnical Investigation (RR GEO-2) related to alluvial soil removal and replacement with engineered fill would prevent structural hazards associated with soil settlement or uplift.

The Project area, including the site, is relatively flat with a slight downward slope towards the southwest. There are no steep slopes on the site where landslides may occur. No landslides have been identified or mapped at the site and landslides or signs of slope instability were not observed at the site. The potential for seismically-induced landslides at the site is considered low. Minor slopes are proposed at the site perimeter to redirect runon flows from adjacent areas and on-site stormwater flows toward the retention basins to be constructed along the western section of the site. The basin slopes would not be steeper than 2:1 and would not be high enough to create landslide hazards. Also, the proposed utility infrastructure and facility upgrades are located in relatively flat areas where no landslide hazards exist. The modified or expanded percolation ponds at the City of California City's (City's) WWTF would also maintain slopes no steeper than 2:1 and would not be high enough to create landslide hazards. No impact related to landslides would occur with the Project.

Impacts would be less than significant with compliance with existing regulations.

Threshold 4.7b: Would the project result in substantial soil erosion or the loss of topsoil?

Short-Term On-Site Construction Impacts

The soils on the Project site consist of Muroc-Randsburg sandy loam, Neuralia sandy loam, and Cajon Loamy sand, with Torriorthents-rock outcrop complex at the northeastern corner. Aside from the rock outcrop, these soils have a high wind erodibility but slight to moderate erosion hazards. Grading, excavation and construction activities on the Project site would lead to the disturbance of soils and a potential for wind and water erosion. The Project would include balanced grading, with approximately 1,900,000 cubic yards of earthwork. As indicated above minor slopes would be provided at the site perimeter and retention basins, no steeper than 2:1 and with down drains and interceptor drains at various locations to prevent erosion and slope instability.

Construction activities may result in wind and water erosion of bare soils. However, construction contractors are required to implement erosion-control, sediment-control, and tracking-control Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) that is required under the State Water Resources Control Board's (SWRCB's) Construction General Permit (see RR HYD-1). Compliance with the Construction General Permit is discussed in Section 4.10, Hydrology and Water Quality. Dust control measures would also be implemented in accordance with the Eastern Kern Air Pollution Control District requirements (see RR AIR-1), as discussed in Section 4.3, Air Quality, and would reduce wind erosion and fugitive dust during construction. Accordingly, the proposed Project would be required to implement erosion-control measures to reduce wind and water erosion and to minimize sediments and loose soils from entering public roadways, storm drain systems, and adjacent areas.

Therefore, implementation of RR HYD-1 from Section 4.10, Hydrology and Water Quality, and RR AIR-1 from Section 4.3, Air Quality, of this EIR would prevent construction activities from resulting in significant adverse impacts associated with substantial soil erosion and/or loss of topsoil. Impacts relating to erosion would be less than significant and no mitigation is required.

Long-Term On-Site Operational Impacts

As the vacant site would be developed with structures, pathways, internal roads, and parking areas upon completion of construction activities, the potential for erosion of bare soils on the Project site would be reduced. Therefore, the Project would not create erosion hazards, but would decrease long-term soil erosion potential from both wind and water. Impacts relating to erosion would be beneficial. No mitigation is required.

Short-Term and Long-Term Off-Site Impacts

Construction of the proposed access road, utility infrastructure and facility upgrades would lead to ground disturbance that could result in loss of topsoil by wind and water erosion. As required under the SWRCB's Construction General Permit, the SWPPP for the Project would include erosion-control, sediment-control, and tracking-control BMPs during construction activities (see RR HYD-1 in Section 4.10, Hydrology and Water Quality) and the Eastern Kern Air Pollution Control District's dust-control measures would reduce wind erosion during construction (see RR AIR-1 in Section 4.3, Air Quality). Short-term impacts would be less than significant.

Utility infrastructure would be placed underground and disturbed areas would be returned to original site conditions after construction. The access road and public facility upgrades would lead to the introduction of impervious surfaces, reducing bare soils that may be subject to wind and water erosion. Thus, no long-term erosion would occur with the proposed utility infrastructure and facility upgrades.

Threshold 4.7c:

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Short-Term and Long-Term On-Site Impacts

As indicated earlier, the site is relatively flat, and there are no landslide hazards on or near the site. Also, there is a remote potential for liquefaction due to the shallow depths of bedrock and the absence of perched groundwater.

Seismically induced settlement consists of liquefaction-induced settlement and dynamic compaction of unsaturated, granular soil in areas with low-density sandy soils subject to a reduction in volume during and shortly after an earthquake event. Since groundwater is not expected within 50 feet of the ground surface and construction will include the replacement of alluvial soils with engineered fill, potential hazards associated with seismically-induced settlement are considered low. The City Building Code, which incorporates the CBC, provides building design criteria to protect the structural integrity of structures and infrastructure against geologic hazards. Compliance with pertinent provisions of the City Building Code and CBC would avoid geological hazards (RR GEO-1).

The CBC also requires preparation of a geotechnical investigation to identify the geologic characteristics on specific locations where structures and infrastructure are proposed and to develop engineering and structural recommendations and measures to reduce hazards from liquefaction, subsidence, and collapsible soils, and other soil characteristics so as to maintain the structural integrity of the Project. Compliance with the recommendations of the Geotechnical Investigation for the Project (RR GEO-2) would prevent structural hazards due to potential soil settlement.

The presence of a continuous liquefiable zone that is unconstrained laterally and free to move along gently sloping ground may lead to lateral spreading. Since the potential for liquefaction at the site is remote, the potential for lateral spreading is also remote.

Subsidence is the settlement of the ground when large amounts of groundwater or oil have been withdrawn from underlying sediments; when underlying limestone deposits dissolve; or from the oxidation of organic soils. Subsidence may cause damage to the overlying structure due to differential settlement. The potential for ground subsidence at the site is considered remote since the site is underlain at shallow depths by granitic bedrock.

Collapsible soils are soils that shrink when the pore spaces become saturated with water, causing the loss of grain-to-grain contact. The weight of overlying structures can cause uniform or differential settlement and can lead to the damage of foundations and walls. Collapses of the ground surface may also occur when the rock below the surface is naturally dissolved by groundwater, leading to sinkholes. Based on the geotechnical investigation for the CCCC, the alluvial soils in the area are potentially collapsible. Therefore, the collapse potential of the on-site should be characterized at the project design stage, or removed and replaced as engineered fill following the recommendations of the Geotechnical Investigation for the Project (RR GEO-2).

Due to the presence of bedrock at shallow depths, the preliminary geotechnical summary discussed the rippability of surficial soils and near-surface bedrock materials. Cuts into bedrock are expected to be rippable with a heavy duty ripper but if seismic velocities are higher than 8,000 feet per second where deep cuts (40 feet in depth) are proposed, blasting may be required. Localized blasting associated with excavation on site would have the potential to result in ground vibration and geotechnical instability, as well as noise. However, compliance with the City's Fire Code (RR GEO-3) and the vibration standards in Section 5-1.410 of the California City Municipal Code (presented as RR NOI-2 in Section 4.12, Noise) would reduce noise and ground vibration from blasting activities. Potential impacts related to ground instability would be reduced to a less than significant level.

Compliance with existing regulations (RR GEO-3 and RR NOI-2), would prevent significant impacts related to unstable soils and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

Construction of the proposed access road, utility infrastructure and public facility upgrades may be subject to unstable soils depending on the local geology and soil conditions along the utility line alignments and facility upgrade locations. As indicated above, compliance with the City Building Code and CBC (RR GEO-1) and the recommendations of the Geotechnical Investigation (RR GEO-2) would prevent structural hazards due to the site-specific soil characteristics at the off-site areas. Impacts would be less than significant and no mitigation is required.

Once constructed, the proposed access road, utility line extensions and public facility improvements would not create or be subject to landslide, lateral spreading, subsidence, liquefaction or collapse. No long-term impacts would occur.

Threshold 4.7d: Would the project be located on expansive soil, as defined in Table

18-1-B of the Uniform Building Code (1994), creating substantial

direct or indirect risks to life or property?

Short-Term and Long-Term On-Site Impacts

Expansive soils are generally associated with soils that are susceptible to significant changes in volume due to expansion under wet conditions and contraction under dry conditions. Depending on the degree of soil expansion, volume changes (shrink and swell) can cause severe damage to slabs, foundations, and concrete flatwork. The geotechnical investigation for the CAC identified the presence of expansive soils, as well as corrosive to moderately corrosive soils, at an adjacent site. As a conservative assumption, the Preliminary Geotechnical Summary assumes that the Project site would also have expansive and corrosive soils and the Project would be exposed to soil expansion hazards.

Compliance with the City's Building Code and CBC (RR GEO-1) and the Geotechnical Investigation for the Project (RR GEO-2) would ensure that soil expansion hazards are addressed during the structural design and construction of proposed structures and site improvements to avoid damage of building components and infrastructure. This compliance would also ensure that potential metal corrosion and/or damage to steel and wire reinforcement bars, utility lines, and other metal pipes and building components would be less than significant.

Impacts would be less than significant and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

Construction of the proposed access road, utility infrastructure and public facility upgrades may be located in areas with expansive soils. Compliance with the City Building Code and CBC (RR GEO-1) and the recommendations of the Geotechnical Investigation (RR GEO-2) would prevent structural hazards due to soil expansion characteristics at off-site areas. Impacts would be less than significant and no mitigation is required.

Threshold 4.7e:

Does the planning area have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Short-Term and Long-Term On-Site Impacts

Sewer services in the City are provided by the City of California City. The City's wastewater treatment plant (WWTP), which has a 1.0-million-gallon per day capacity, is located on Nelson Drive (at the northeastern section of the City's central core). There is an existing 12-inch diameter sewer line in the parking lot of the CCCC that runs westerly toward Virginia Boulevard and northerly to Gordon Boulevard, turning westerly to 145th Street and then running northerly to tie to an 18-inch wastewater pipeline on Twenty Mule Team Parkway. The pipeline in Twenty Mule Team Parkway extends southwesterly toward Randsburg-Mojave Road, where it turns westerly into the WWTP. These sewer line alignments would provide sewer service to the Project and no septic tanks or alternative wastewater disposal systems are needed for the Project. Therefore, no impacts related to soil infiltration capacity would occur and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

The Project would be served by new sewer lines, either connecting to the existing sewer line at the CCCC, in Gordon Boulevard, or in Twenty Mule Team Parkway. Construction and maintenance of the proposed access road, off-site sewer lines, and other off-site infrastructure lines and utility upgrades would not result in wastewater that would require wastewater/sewage treatment and disposal. No septic tanks or alternative wastewater disposal systems are proposed by the Project at the site or at off-site locations. The improvements at the WWTP would occur in an area where percolation ponds are existing and the soils in this area are assumed to pose to constraints to percolation. Thus, no impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would occur.

Threshold 4.7f: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Short-Term Construction Impacts

No paleontological resources were discovered on the Project site and associated utility infrastructure alignment and public facility improvement sites as a result of the field survey. According to the paleontological resource records search and scientific literature review for the Project area and surrounding region, no vertebrate fossil localities have been recorded within the Project area; however, there are localities from the same sedimentary deposits that may occur on the Project area. The surficial deposits of younger Quaternary Alluvium on the Project area typically do not contain significant vertebrate fossil. However, vertebrate fossils have been recorded in Quaternary Alluvium and Older Quaternary sediments nearby. Shallow grading of the Project area is unlikely to impact significant vertebrate fossils, but deeper excavations that extend into older deposits may unearth significant vertebrate remains.

The subsurface disturbance necessary for construction of the proposed Project, including grading to as deep as 40 feet below the ground surface, could result in impacts to Older Alluvial sediments. Therefore, implementation of MM GEO-1 which sets the monitoring procedures and protocols to be followed during project construction, is required. Compliance with MM GEO-1 would reduce impacts to less than significant levels after mitigation.

Long-Term Operational Impacts

Operation of the Project and use of the off-site utility infrastructure and public facilities would not involve grading and excavation that may lead to the discovery or disturbance of paleontological resources. No long-term impacts would occur.

4.7.6 CUMULATIVE IMPACTS

The impacts associated with the geologic and seismic characteristics of the Project site typically have little, if any, cumulative relationship with the impacts of other development projects on separate sites. As such, the proposed Project would not alter the geologic events or soil characteristics (such as groundshaking, seismic intensity, or soil expansion) at another site, nor would it change the geologic conditions or hazards at any off-site location.

However, geologic and seismic conditions are regional in nature and affect large areas, rather than individual parcels. Therefore, the Project, as well as future growth and development in the surrounding areas, in the City, and in Kern County, would be subject to the same geologic hazards created by earthquake faults (e.g., ground shaking); the local geology (e.g., soil settlement); and other areawide geologic issues (i.e., shallow bedrock).

Compliance with applicable State and local building regulations (i.e., California City Building Code, Kern County building codes, and/or CBC) would be required of all development in the City and in Kern County, as applicable. Individual projects would be designed and built in accordance with applicable standards in the CBC and the individual building regulations of local jurisdictions (e.g., RR GEO-1), including pertinent seismic design criteria. Site-specific geologic hazards would be addressed by the Engineering Geologic Report, Supplemental Ground-Response Report, and/or Geotechnical Report required for each development project (RR GEO-2). These geologic investigations would identify the specific geologic and seismic characteristics on a site and provide guidelines for engineering design and construction to maintain the structural integrity of proposed structures and infrastructure. Therefore, compliance with applicable State and local building regulations and standard engineering practices related to seismic and geologic hazard reduction would prevent significant cumulative adverse impacts associated with geologic and seismic hazards.

Development projects in the City would have to connect to the public sewer system where available, as required under the *California Plumbing Code* (Part 5 of the California Building Code, Section 713.2). In areas where public sewer service is unavailable, future development may utilize septic tanks or alternative wastewater disposal systems, subject to the requirements of the SWRCB and the Kern County Public Health Services Department. These requirements include a seepage pit feasibility report and percolation tests that would determine the ability of local soils to support septic systems. Therefore, compliance with applicable State and local building regulations and standard engineering practices would prevent significant cumulative adverse impacts relating to soils incapable of supporting septic systems.

The potential impacts of the Project and other development projects on geology and soils would not be cumulatively considerable, with compliance with existing regulations and implementation of site-specific geotechnical recommendations.

4.7.7 MITIGATION MEASURES

MM GEO-1 Prior to the commencement of ground-disturbing activities (i.e., grading and excavation for footings and utility trenches), a qualified Paleontologist shall be retained and shall attend the pre-grade meeting.

Paleontological monitoring shall be conducted, as determined necessary by the Supervising Paleontologist during grading and other excavation work but shall typically be required during ground disturbance in sediments more than five feet in depth and when Older alluvial sediments are encountered. Recommended hours for monitoring activities shall be established by the Supervising Paleontologist based on an understanding of the proposed depth and extent of grading activities. It shall be the responsibility of the Supervising Paleontologist to demonstrate, to the satisfaction of the City, the appropriate level of monitoring necessary based on the grading plan.

Any paleontological resource evaluation and salvage work at the Project site and off-site utility corridor alignment shall be conducted under the direction of a qualified Paleontologist. If a fossil discovery occurs during grading operations, grading shall be diverted around the area until the Paleontologist can survey the area, evaluate the discovery, and if significant, salvage the fossil. Any fossils recovered, along with their contextual stratigraphic data, shall be donated to the City of California City, the County of Kern, or another appropriate institution with an educational and research interest in the materials. The Paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.

4.7.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of MM GEO-1, impacts to paleontological resources resulting from implementation of the proposed Project would be reduced to a less than significant level. Direct, indirect, and cumulative impacts related to geology and soils from Project implementation would be less than significant and no mitigation is required.

4.7.9 REFERENCES

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4.8 GREENHOUSE GAS EMISSIONS

This section addresses greenhouse gas (GHG) emissions anticipated from construction and operation of the proposed Project and its potential global climate change impacts. The Project's estimated construction and operational GHG emissions were calculated by using the California Emissions Estimator Model (CalEEMod, Version 2013.2.2); the inputs and data for the Project are included in Appendix B.

4.8.1 RELEVANT PROGRAMS AND REGULATIONS

<u>Federal</u>

U.S. Environmental Protection Agency Findings

On December 7, 2009, the U.S. Environmental Protection Agency (USEPA) Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act (CAA). The findings state:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the USEPA's proposed GHG emission standards for light-duty vehicles (USEPA 2010a). A light-duty vehicle is defined as a passenger car capable of seating 12 passengers or less (USEPA 2015b).

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) have been working together on developing a National Program of regulations to reduce GHG emissions and to improve the fuel economy of light-duty vehicles. On April 2, 2018, the USEPA issued the Mid-Term Evaluation Final Determination that found that the MY 2022-2025 CO₂ emissions standards are not appropriate and should be revised. On March 31, 2020, the USEPA and NHTSA set tough but feasible fuel economy and CO₂ standards that intend to reduce CO₂ emissions related to fuel efficiency. These standards apply to both passenger cars and light trucks, and will continue our nation's progress toward energy independence and CO₂ reduction. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule increases the stringency of corporate average fuel economy (CAFE) and CO₂ emissions standards by 1.5 percent each year through model year 2026, as compared with the standards issued in 2012, which would have required about 5 percent annual increases. Generally, the larger the vehicle footprint, the less numerically stringent the corresponding vehicle CO₂ and miles per gallon (mpg) targets. As a result of the footprint-based standards, the burden of compliance is distributed across all vehicle footprints and across all manufacturers. Each manufacturer is subject to individualized standards for passenger cars and light trucks, in each model year, based on the vehicles it produces.

As in the CAFE and CO₂ rulemakings in 2010 and 2012, NHTSA and USEPA proposed to set attribute based CAFE and CO₂ standards defined by a mathematical function of vehicle footprint, which has observable correlation with fuel economy and vehicle emissions. The rules require light-duty, light-duty trucks, and medium-duty passenger vehicles to not exceed targeted emissions levels based upon their manufacture date. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017-2025). The combined USEPA GHG standards and NHTSA CAFE standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2010b; USEPA and NHTSA 2012). The SAFE Vehicles Rule continues to protect the environment by increasing stringency of CAFE and CO2 emissions standards over the next five years. Under the SAFE Rule, the projected overall industry average required fuel economy in MYs 2021-2026 is 40.4 mpg, compared to the 46.7 mpg projected requirement in MY 2025 under the 2012 standards, and the new rule reduces the number of credits that are not associated with improved fuel economy. At the same time, the SAFE Vehicles Rule provides regulatory certainty by establishing one set of national fuel economy and CO₂ emissions standards for passenger cars and light trucks. Under the rule, new vehicles will continue to be required to meet the Clean Air Act's strict pollution standards, ensuring that air quality will be protected from smoq-forming emissions. The rule will also reduce annual CO2 emissions (NHTSA 2020).

State

Clean Car Standards (Assembly Bill 1493)

Assembly Bill (AB) 1493, adopted September 2002, also known as Pavley I, requires the development and adoption of State regulations to achieve the maximum feasible reduction of GHGs emitted by non-commercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. Although setting emissions standards on automobiles is solely the responsibility of the USEPA, the CAA allows California to set State-specific emission standards on automobiles if the State first obtains a waiver from the USEPA. The USEPA granted California that waiver on July 1, 2009. The emission standards become increasingly more stringent through the 2016 model year. California is also committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from 2020 model year vehicles (CARB 2009). After adopting these initial GHG standards for passenger vehicles, California Air Resources Board (CARB) adopted continuing standards for future model years.

The USEPA and the NHTSA collaborated with the CARB to build on the success of the first phase of the National Program to regulate fuel economy and GHG emissions from U.S. light-duty vehicles. The fuel efficiency and GHG emission standards for passenger cars and light-duty trucks with manufacture dates between MY 2017 through 2025 were discussed in a joint technical assessment (NHTSA 2016). The analysis assessed future levels of GHG emission controls for vehicle Model Year 2017 through 2025. These GHG emissions levels can be translated to mpg-equivalent levels but may not translate directly into equivalent CAFE standards due to their inclusion of credits for A/C improvements, which is permissible for CAA standards but not for CAFE standards.

Four scenarios of future stringency are analyzed for MYs 2020 and 2025, starting with a 250 gram/mile estimated fleet-wide level in MY 2016 and lowering CO₂ scenario targets at the rates of 3 percent per year, 4 percent per year, 5 percent per year, and 6 percent per year, respectively. These four different technology pathways were developed in order to capture both the current levels of uncertainty regarding the potential rate of penetration of various advanced technologies

and to illustrate more than one approach that the auto industry could take in responding to future targets. These standards support a reduction in GHG emissions, and commensurate increase in fuel economy, of up to 6 percent per year in the 2017–2025 timeframe., leading to a lifetime fuel reduction ranging from 0.7 (3 percent annual GHG reduction) to 1.3 (6 percent annual GHG reduction) billion barrels.

The targeted emission thresholds for each of these four scenarios is described below in Table 4.8-1 for the MY between 2020 and 2025:

TABLE 4.8-1
CALIFORNIA LIGHT-DUTY VEHICLE GREENHOUSE GAS
AND FUEL EFFICIENCY TARGETS

Scenario Title	CO2 Target (g/mile) in MY 2020 (MPG)	CO2 Target (g/mile) in MY 2025 (MPG)
3% per year	221 (40)	190 (47)
4% per year	212 (42)	173 (51)
5% per year	204 (44)	158 (56)
6% per year	195 (46)	143 (62)

For passenger automobiles with a footprint that is greater than 41 square feet and less than or equal to 56 square feet, the gram/mile CO2 target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO2 target value shall be the value specified for the same model year in paragraph (c)(2)(i)(B) of this section: Target CO2 = $[a \times f] + b$ Where: f is the vehicle footprint, as defined in § 86.1803; and a and b correlate to the appropriate manufacture model year and as listed in the table cited in § 86.1818–12 (USEPA2020):

Executive Order S-3-05

On June 1, 2005, the California Governor signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

California Global Warming Solutions Act of 2006 (Assembly Bill 32)

The California Legislature adopted the public policy position that global warming is "a serious threat to the economic well-being, public health, natural resources, and the environment of California" (*California Health and Safety Code*, Section 38501). Further, the State Legislature has determined that:

the potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra Nevada snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious disease, asthma, and other human health-related problems.

The State Legislature also states that:

Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial

fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the State (*California Health and Safety Code*, Section 38501).

These public policy statements became law with the enactment of AB 32, the California Global Warming Solutions Act of 2006. AB 32 is now codified as Sections 38500 through 38599 of the California Health and Safety Code.

AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions to be phased in starting in 2012. AB 32 directs CARB to establish this Statewide cap based on 1990 GHG emissions levels; to disclose how it arrived at the cap; to institute a schedule to meet the emissions cap; and to develop tracking, reporting, and enforcement mechanisms. Emissions reductions under AB 32 are to include carbon sequestration projects and best management practices that are technologically feasible and cost effective.

Senate Bill 32 California Global Warming Solutions Act of 2006: emissions limit.

The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of GHG. The state board is required to approve a statewide GHG emissions limit equivalent to the statewide GHG level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. This bill would require the State board to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. SB 32 was contingent on the passing of AB 197, a California bill intended to increase legislative oversight. AB 197 was passed and signed into law on September 8, 2016. SB 32 was also signed into law on September 8, 2016 and went into effect on January 1, 2017. SB 32 gives CARB the authority to adopt regulations in order to achieve the maximum technology feasible to be the most cost-efficient way to reduce GHG emissions.

Senate Bill 97 and Amendments to the California Environmental Quality Act Guidelines

Senate Bill (SB) 97 directed the California Natural Resources Agency (CNRA) to adopt amendments to the California Environmental Quality Act (CEQA) Guidelines that require evaluation of GHG emissions or the effects of GHG emissions by January 1, 2010. The CNRA has done so, and the amendments to the CEQA Guidelines, in a new Section 15064.4, entitled Determining the Significance of Impacts from Greenhouse Gas Emissions, provide that:

- a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
 - Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate, provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or
 - 2) Rely on a qualitative analysis or performance based standards.

- b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
 - 1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - 2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
 - 3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The guideline amendments also add a new Section 15126.4(c), Mitigation Measures Related to Greenhouse Gas Emissions. Generally, this State CEQA Guidelines section requires lead agencies to consider feasible means—supported by substantial evidence and subject to monitoring or reporting—of mitigating the significant effects of GHG emissions. Potential measures to mitigate the significant effects of GHG emissions are identified, including examples such as those outlined in Appendix F, Energy Conservation, of the State CEQA Guidelines.

California Air Resources Board Scoping Plan

In 2008, CARB approved a *Climate Change Scoping Plan* as required by AB 32. The *Climate Change Scoping Plan* proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The *Climate Change Scoping Plan* has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The *Climate Change Scoping Plan* calls for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions will be addressed through a combination of higher standards for vehicle fuel economy; implementation of the Low Carbon Fuel Standard; and greater consideration for reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations will be encouraged and, sometimes, required to use energy more efficiently. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the *Climate Change Scoping Plan* emphasizes opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicates that substantial savings of electricity and natural gas will be accomplished through "improving energy efficiency by 25 percent" (CARB 2008).

In December 2017, the Second Update to the Climate Change Scoping Plan was adopted. The Second Update to the Scoping Plan includes the new statutory GHG reduction requirements that were not included in the previous Scoping Plan, including SB 32 (which sets a 40 percent GHG

reduction target below 1990 GHG levels to be achieved by 2030), SB 350 (which sets a 50 percent reduction in GHG emissions from electricity generation and other energy uses in existing structures, and a 50 percent renewable energy portfolio requirement), and SB 650 (which establishes priority GHG reduction targets for designated types of greenhouse gases, such as methane) (CARB 2017).

Senate Bill 375

Signed September 30, 2008, SB 375 provides for a new planning process to coordinate land use planning and regional transportation plans and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires Metropolitan Planning Organizations, including the Kern Council of Governments, to incorporate a Sustainable Communities Strategy (SCS) in their regional transportation plans that will achieve GHG emission reduction targets set by CARB. There are two mutually important facets to SB 375: reducing vehicle miles traveled (VMT) and encouraging more compact, complete, and efficient communities for the future. SB 375 also includes provisions for exemptions from or streamlined CEQA review for projects classified as transit priority projects.

Executive Order B-30-15

On April 29, 2015, the California Governor signed Executive Order (EO) B-30-15, which orders "A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050" (COOG 2015). EO B-30-15 also directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂ equivalent.

Title 24, Part 6, Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the *California Code of Regulations* [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Commission adopted 2008 changes to the Building Energy Efficiency Standards in order to (1) "provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020". Title 24 Parts 6 and 11 of the California Building Standards Code - the California Energy Code – are updated every 3 years. The 2019 Building Energy Efficiency Standards took effect on January 1, 2020. The 2022 Building Energy Efficiency Standards are currently in the pre-rulemaking phase.

Title 24, Part 11, Green Building Standards

The 2019 California Green Building Standards Code (CBSC) (24 CCR, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. CBSC was adopted in 2008 and went into effect August 1, 2009. CBSC was designed in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of GHG to 1990 levels by 2020. The Code is Part 11 of the California Building Standards Code in Title 24 of the *California Code of Regulations*, and is also known as the CalGreen Code (CBSC 2018).

The development of the CalGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live

and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. The CalGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The Code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

Updated CBCS non-residential mandatory measures went into effect on January 1, 2019. These updates added new codes, such as amended section 5.106.5.3.5 pertaining to future EV charging spaces, as well as several amendments to Water Efficiency and Conservation (Division 5.3), Material Conservation and Resource Efficiency (Division 5.4), and Environmental Quality (Division 5.5) (Department of General Services 2018).

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is the association of Air Pollution Control Officers representing all 35 local air quality agencies throughout California. CAPCOA is not a regulatory body, but has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change, as well as other air quality issues.

The August 2010 CAPCOA publication, *Quantifying Greenhouse Gas Mitigation Measures*, *A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* provides guidance on the quantification of project-level mitigation of GHGs associated with land use, transportation, energy use, and other related project areas (CAPCOA 2010). The guidance includes detailed procedures about the approaches to assessing and calculating the GHG emissions reductions associated with project design features and mitigation measures. This publication's methods are used in the CalEEMod Version 2013.2.2 computer model that is used to calculate GHG emissions.

Regional

Eastern Kern Air Pollution Control District Policy

The Project site lies within the boundaries of the Eastern Kern Air Pollution Control District (EKAPCD). The EKAPCD area includes the eastern section of Kern County, within the Mojave Desert Air Basin. The EKACPD has adopted a policy for addressing GHG emission impacts for stationary source projects when the EKAPCD is serving as the CEQA lead agency (EKAPCD 2012). The policy states that projects are considered to have a less than significant or cumulatively considerable impact on GHG emissions if it meets one of the following conditions:

- 1. Project-Specific GHG emissions are less than 25,000 tons per year (tpy);
- 2. The project demonstrates to EKAPCD that it is in compliance with state GHG reduction plan such as AB 32 or future federal GHG reduction plan if it is more stringent than State plan:

- 3. Project GHG emissions will be mitigated to a less than significant impact if GHGs can be reduced by at least 20 percent below Business-As-Usual (BAU) through implementation of one or more of the following strategies:
 - (a) Compliance with a Best Performance Standard (BPS) as set forth in the Policy;
 - (b) Compliance with GHG Offset as detailed in the Policy; or
 - (c) Compliance with an Alternative GHG Reduction Strategy.

If none of the above conditions is met, an Environmental Impact Report (EIR) is required.

City

California City Building Code

The City of California City Building Code (City Building Code) is contained in Title 8 of the City Municipal Code. The City Building Code incorporates (and adopts by reference) the most current edition of the California Building Code (CBC), which, in turn, incorporates the 2018 International Building Code. Section 8-1.01 of Title 8 (Chapter 1) of the City Building Code states that, "The most current edition, nor or in the future published, of the Code designated as the "Uniform Building Code," adopted by the California Building Standards Commission. The 2019 California Building Standards Code (Title 24 of the *California Code of Regulations*) was published July 1, 2016 and became effective on January 1, 2020. Part 11 of the CBC is the CalGreen Code.

4.8.2 EXISTING CONDITIONS

Global Climate Change and Greenhouse Gases

Climate change is a recorded change in the Earth's average weather measured by variables such as wind patterns, storms, precipitation, and temperature. Historical records show that global temperature changes have occurred naturally in the past, such as during previous ice ages. The year 2019 ranks as Earth's second warmest year since 1880 with the warmest year occurring in 2016 (NASA 2020a). The 19 warmest years in the instrumental record, with the exception of 1998, have now occurred since 2000. The average global temperature has risen about 1.9 degrees Fahrenheit (°F) since 1880 (NASA 2020a).

The global atmospheric concentration of CO₂ has increased from a pre-industrial (roughly 1750) value of about 280 parts per million (ppm) to a peak of 414 ppm, primarily due to fossil fuel use, with land use change providing a significant but smaller contribution. (NASA 2020b)

Greenhouse Gases

GHGs are global pollutants and are therefore unlike criteria air pollutants such as ozone (O_3) , particulate matter (PM10 and PM2.5), and toxic air contaminants (TACs), which are pollutants of regional and local concern (see Section 4.3, Air Quality, of this EIR). While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Therefore, GHG effects are global, as opposed to the local and/or regional air quality effects of criteria air pollutant and TAC emissions.

As stated above, GHGs, as defined under California's AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a

measure of both potency and lifespan in the atmosphere as compared to CO_2 . For example, as CH_4 and N_2O are approximately 21 and 310 times (respectively) more powerful than CO_2 in their ability to trap heat in the atmosphere, they have GWPs of 21 and 310, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2 e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2 e.

General Environmental Effects of Global Climate Change

Executive Order S-3-05 mandates the preparation of biennial science assessment reports on climate change impacts and adaptation options for California. Executive Order S-13-08 directs the CNRA to develop a State Climate Adaptation Strategy and to provide State land use planning guidance related to sea level rise and other climate change impacts. Current reports resulting from these directed actions are the *Climate Action Team Report to the Governor and Legislature* and the *California Climate Adaptation Strategy* (CalEPA 2010; CNRA 2009). These studies report that global warming in California is anticipated to impact resources including, but not limited to, those discussed below:

- **Public Health.** Many Californians currently experience the worst air quality in the nation, and climate change is expected to make matters worse. Higher temperatures would increase the frequency, duration, and intensity of conditions conducive to air pollution formation. If global background O₃ levels increase as predicted under some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by more frequent wildfires, which emit fine particulate matter that can travel long distances. Rising temperatures and more frequent heat waves would increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress. Climate change may also increase asthma rates and the spread of infectious diseases and their vectors, as well as challenge food and water supplies. Children, the elderly, people with chronic heart or lung disease, outdoor workers, people who exercise outdoors and the economically disadvantaged would be particularly vulnerable to these changes. In addition, more frequent extreme weather events could also result in increased injuries and deaths from these phenomena.
- Energy. Increasing mean temperature and more frequent heat waves will drive up demand for cooling in summer; this new energy demand will only be partially offset by decreased demand for heating in winter. Hydropower, which currently provides 15 percent of in-state generation, would be threatened by declining snowpack, which serves as a natural reservoir for hydropower generation in the spring and summer. Winter storms, earlier snowmelt, and greater runoff may combine to cause flooding, which could, in turn, damage transmission lines and cause power outages.
- Water Resources. Rising temperatures, less precipitation, and more precipitation falling as rain instead of snow could severely diminish snowpack. Because the Sierra Nevada snowpack provides most of California's available water, this potential loss would increase the risk of summer water shortages and would hamper water distribution and hydropower generation. The diminished snowpack would also nearly eliminate all skiing and other snow-related recreation. Rising sea levels would push saltwater into California's estuaries, wetlands, and groundwater aquifers, threatening the water quality and reliability in the Sacramento/San Joaquin River Delta—a major California freshwater supply. Extreme precipitation and flooding could also damage water quality by creating sudden increases in runoff. Moreover, warming would increase evapotranspiration rates from plants, soil, and open water surfaces, which would result in greater demand for irrigation. Overall, climate change would reduce California's water supplies even as its growing population requires additional resources.

- Sea Level and Flooding. Sea level at California's coasts is expected to rise by 11 to
 18 inches above 2000 levels by 2050 and by 23 to 55 inches by 2100. If realized, these
 increases would create more frequent and higher storm surges; would erode some coastal
 areas; and would increase pressure on existing levees. These increases would create a
 greater risk of flooding in previously untouched inland areas. Consequently, continued
 development in vulnerable coastal areas would put more people and infrastructure at risk.
- Agriculture. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, in the long-term, climate change would reduce the quantity and quality of agricultural products statewide. As temperatures rise, farmers will face greater water demand for crops and a less reliable water supply, as well as increased competition from urban water users. Sea level rise may cause saltwater intrusion in the Delta region, making it difficult to raise certain crops. Rising temperatures will likely aggravate O₃ pollution, interfering with plant growth and making plants more susceptible to disease and pests. In addition, warming would reduce the number of colder hours needed for fruit and nut production; would shift pest and weed ranges; would alter crop-pollinator timing; and would increase the frequency of droughts, heat waves, and floods. Higher average temperatures would also increase mortality and decrease productivity in livestock.
- Forestry. California timber production has declined over the past few decades due, in part, to warming and increased wildfires. While further warming may increase production for some species in some locations, climate change is expected to reduce overall forest growth. Increasing average temperatures and drought frequency would result in more wildfires and greater burned areas, while less frequent and more intense rainfall would increase soil erosion and landslides. Higher temperatures and less water would force many tree species to shift their ranges; those that run out of livable habitat may die out. Pests, diseases, and invasive species may also colonize new areas, further challenging forest health and biodiversity.
- Ecosystems. Rising average temperatures would subject plants and animals to greater thermal stress, causing some species to adapt or shift their ranges, while others may face extinction. Invasive species may also shift their ranges, threatening native species. Changing temperatures would also alter the timing of plant flowering and insect emergence, damaging species' ability to reproduce. Changing precipitation patterns would impact aquatic and riparian ecosystems by reducing snow pack, stream flow, and groundwater, while increasing the frequency of droughts, floods, and wildfires. As sea levels rise, some coastal habitats may be permanently flooded or eroded, and saltwater intrusion into freshwater resources may threaten terrestrial species. Changes in ocean circulation and temperature, ocean acidification, and increased runoff and sedimentation would threaten pelagic species. In sum, continued global warming would alter natural ecosystems and threaten California's biological diversity

Global, National, State, and Regional Contributions to GHG Emissions

Table 4.8-2 compares the magnitude of GHG emissions on the global, national, State, and regional (i.e., Kern County) scales.

TABLE 4.8-2 COMPARISON OF WORLDWIDE GHG EMISSIONS

Area and Data Year	Annual GHG Emissions (MMTCO₂e)
World (2016)	48,000
United States (2018)	6,677
California (2017)	424
Kern County (2013)	5.6
MMTCO ₂ e: million metric tons of carbon dioxide equivalent	
Source: ClimateWatch; USEPA 2015a; CARB 2019.	

The U.S. contributes approximately 14.7 percent of worldwide GHG emissions per year; California contributes approximately 1.0 percent; and Kern County contributes approximately 0.01 percent. The most common GHG is CO₂, which constitutes approximately 84 to 85 percent of all GHG emissions in the U.S. and California. The primary contributors to California's GHG emissions are (1) transportation; (2) electric power production from both in-state and out-of-state sources; and (3) industrial uses.

The Project site is currently undeveloped and does not generate GHG emissions.

4.8.3 THRESHOLDS OF SIGNIFICANCE

Because the magnitude of global GHG emissions is extremely large when compared with the emissions of typical development projects, it is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change. CAPCOA's CEQA and Climate Change Report states, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective" (CAPCOA 2008). As noted by the CNRA, "Due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis" (CNRA 2009c). Therefore, the analysis presented in this section represents the cumulative impact analysis for the Project-related to GHG emissions.

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Greenhouse Gas if it would:

- **Threshold 4.8a** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Threshold 4.8b** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The EKACPD Policy for GHG emissions sets a threshold of 25,000 tons per year. A project with GHG emissions below this value is considered to have a less than significant effect (EKACPD 2012).

4.8.4 REGULATORY REQUIREMENTS

RR GHG-1 The Project will be designed and constructed in accordance with the CalGreen Code and the *California Code of Regulations*, Title 24 Building Energy Efficiency Program, which establishes a minimum level of building energy efficiency and requires energy efficient measures, including ventilation, insulation, and

construction and the use of energy-saving appliances, conditioning systems, water heating, and lighting.

4.8.5 IMPACT ANALYSIS

Threshold 4.8a Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Long-term GHG emissions from energy sources, mobile sources (i.e., vehicles), and area sources and short-term emissions from construction equipment were calculated by using

CalEEMod Version 2013.2.2. CalEEMod is a computer program developed for all air districts in California that can be used to estimate GHG emissions associated with land development projects.

Specific inputs to CalEEMod for both construction and operation include land uses and acreages. Output operational emissions data include area sources, energy sources, mobile sources, waste generation, and water usage. The area sources include engine emissions from the use of maintenance equipment. Energy sources include natural gas and electricity usage. Mobile sources are the vehicles used by the CFCC staff, inmate transport, visitors, and vendors, based on trip generation forecasts for this Project; see Section 4.16, Transportation and Traffic and Appendix J of this EIR. Waste generation includes emissions from disposal of solid waste generated by the Project. Water usage emissions include the energy used to deliver potable water to the Project site and treat the wastewater generated by the Project.

Construction input data include, but are not limited to, the start and finish dates of Project construction phases; inventories of construction equipment to be used during each phase; the grading area; materials to be imported to and exported from the site; areas to be paved; and areas to be painted. It is noted that the proposed grading plan shows balanced grading; soil import and export are not anticipated for the Project. Additional details relative to the CalEEMod calculations may be found in Section 4.3. Air Quality, and in Appendix B of this EIR.

Because construction activity impacts are relatively short-term, they contribute a relatively small portion of the total lifetime GHG emissions of a project. In addition, GHG emission-reduction measures for construction equipment are relatively limited. Therefore, it has become current practice (in most air districts) that construction emissions are amortized over a project lifetime (typically 30 years) so that GHG-reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies That method is used in this analysis.

Short-Term On-Site and Off-site Construction Impacts

Construction activities would result in the temporary generation of GHGs through off-road and on-road construction equipment and worker vehicles. The Project is proposed for construction beginning in 2024, with Phase 1 of the Project in operation by 2026 and Phase 2 construction starting in 2026 to the end of 2028. The details of phasing, construction equipment, and other input parameters are described in Section 4.3, Air Quality, and include construction of off-site infrastructure and public facility improvements. The results of the CalEEMod calculations for GHGs from project construction are shown in Table 4.8-3. The construction of the Project would result in estimated GHG emissions of approximately 5,476 MTCO₂e, or annual GHG emissions of 182 MTCO₂e when amortized over 30 years.

TABLE 4.8-3
ESTIMATED CONSTRUCTION ANNUAL GHG EMISSIONS

Year	Emissions (MTCO₂e)
2024	1,026
2025	2,841
2026	288
2027	918
2028	403
Total	5,476
Annual Construction Emissions Amortized over 30 Years	182
MTCO ₂ e: metric tons of carbon dioxide equivalent	
Calculations in Appendix B	

Because construction emissions are amortized over a 30-year project lifetime, the level of significance for construction emissions related to the Project is included in the section on "Operational Activities", and a separate significance finding for construction emissions is not necessary.

Long-Term On-Site Operational Impacts

Operational GHG emissions for the Project were calculated in accordance with the methods described above. Mobile source input for trip generation was taken from the Project's Traffic Impact Study, provided in Appendix J of this EIR. As described in the Project Traffic Impact Study, it is anticipated that the Project would result in 1,216 new vehicle trips.

Project-specific estimates for electricity, natural gas, water, and solid waste use were developed by CoreCivic for inputs to the calculations. The results of the calculations are shown in Table 4.8-4; CalEEMod data sheets are included in Appendix B of this EIR. The total operational GHG emissions at buildout of the Project are estimated at 22,640 MTCO₂e per year. Reductions in energy demand resulting from implementation of RR GHG-1 (CalGreen Code compliance) were not included in the GHG emissions calculations because the reduction amounts could not be reasonably quantified. Therefore, the GHG emissions estimates in Table 4.8-4 are conservatively high.

TABLE 4.8-4
ESTIMATED OPERATIONAL ANNUAL GHG EMISSIONS

Source	Emissions MTCO₂e/yr	Percent of Total
Area	<1	0%
Energy	7,184	32%
Mobile	9,106	40%
Stationary	<1	0%
Solid Waste	4,500	20%
Water	1,850	8%
Annual GHG Emissions	22,640	100%
MTCO ₂ e/yr: metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas(es)		

Note: Totals may not add due to rounding.

As described above, construction and operational GHG emissions are combined by amortizing the construction operations over a 30-year period. As shown in Table 4.8-5, with consideration of amortized construction emissions, the total annual estimated GHG emissions for the Project are 22,823 MTCO $_2$ e/yr. This value is less than the EKACPD threshold of 25,000 tons per year. Therefore, the Project would result in less than significant GHG emissions and no mitigation is required. As previously discussed, the significance finding is cumulative, as the Project's GHG emissions alone would have no direct impact on the environment.

TABLE 4.8-5
ESTIMATED TOTAL ANNUAL GHG EMISSIONS

Source	Emissions MTCO ₂ e/yr
Construction (amortized) (from Table 4.8-3)	183
Operations (from Table 4.8-4)	22,640
Total	22,823
EKAPCD Threshold	25,000
Exceeds Threshold?	No
MTCO ₂ e/yr: metric tons of carbon dioxide equivalent per year	

Thus, GHG emissions from the Project would be less than significant and no mitigation is required.

Long-Term Off-site Operational Impacts

Use of the access road and improved utility infrastructure would not generate GHG emissions in the long-term. Use of the additional pump at the Phase 1 booster pumping station would require electricity but this electrical demand would be minimal and would not result in any measurable GHG emission over the long-term. Similarly, expanded wastewater treatment at the City's wastewater treatment plant would increase the use of electricity through new equipment but this electrical demand would be minimal and would not result in any measurable GHG emission over the long-term. Off-site impacts related to GHG emissions would be less than significant and no mitigation is required.

Threshold 4.8b Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Short-Term and Long-Term On-Site and Off-site Impacts

The California Legislature adopted the public policy position that global warming is "a serious threat to the economic well-being, public health, natural resources, and the environment of California" (*California Health and Safety Code*, Section 38501). Further, the State Legislature has determined that:

The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra Nevada snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious disease, asthma, and other human health-related problems.

These public policy statements became law with the enactment of AB 32 in September 2006. AB 32 is now codified as Sections 38500–38599 of the *California Health and Safety Code*. Thus, the principal State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. The quantitative goal of AB 32 is to reduce statewide GHG emissions to 1990 levels by the year 2020. Statewide plans and regulations, such as GHG emissions standards for vehicles and the Low Carbon Fuel Standard, are being implemented, but compliance by individual projects is not addressed. Therefore, the Project would not conflict with these plans and regulations.

The regulations, plans, and polices adopted for the purpose of reducing GHG emissions and maximizing energy efficiency that are directly applicable to the Project include: (1) California's Title 24, Part 6 Energy Efficiency Standards for Residential and Nonresidential Buildings; (2) California's Title 24, Part 11 CalGreen Code; and (3) Title 8 of the California City Municipal Code that adopts the CalGreen Code by reference. The Project would be consistent with the requirements of these energy-related regulations, as per RR GHG-1.

The CalGreen Code provides standards for the following, among others: bicycle parking; carpool, vanpool, and electric vehicle spaces; light and glare reduction; grading and paving; energy efficient appliances; renewable energy; graywater systems; water efficient plumbing fixtures; construction waste management; recycling and recycled materials; equipment and systems testing and operations; pollutant controls (including moisture control and indoor air quality); acoustical control; storm water management; building design; insulation; and flooring and framing. Beyond these standards, optional Tier 1 status can be achieved by complying with voluntary measures, which would result in 15 percent less energy use and 30 percent less indoor water use than required by existing regulations. Optional Tier 2 status can be achieved by complying with voluntary measures, which would result in 30 percent less energy use and 35 percent less indoor water use than required by existing regulations.

Compliance by the Project with the water and energy conservation measures, construction waste reduction measures, and bicycle and preferential parking requirements in the CalGreen Code would reduce the energy use of the Project and associated GHG emissions.

Thus, the Project would be consistent with and would not conflict with regulations and policies adopted for the purpose of reducing GHG emissions. No impact related to GHG plans, policies and regulations would occur; no mitigation is required.

4.8.6 CUMULATIVE IMPACTS

As shown in Table 4.8-5, with consideration of amortized construction emissions, the total annual estimated GHG emissions for the Project are $17,314\,\mathrm{MTCO_2e/yr}$. This value is less than the EKACPD threshold of 25,000 tons per year. Therefore, the Project would result in less than significant GHG emissions and no mitigation is required. As previously discussed, the significance finding is cumulative, as the Project's GHG emissions alone would have no direct impact on the environment. The assessment of GHG emissions is inherently cumulative because climate change is a global phenomenon. Therefore, the cumulative impact of the Project's GHG emissions on climate change is less than significant.

4.8.7 MITIGATION MEASURES

No significant impacts from GHG emissions have been identified; therefore, no mitigation is required.

4.8.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with RR GHG-1 would ensure that there would be a less than significant impact related to GHG emissions. There would be no impact related to conflict with regulations and policies adopted to reduce GHG emissions.

4.8.9 REFERENCES

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4.9 HAZARDS AND HAZARDOUS MATERIALS

This section analyzes the potential impacts of the Project as it relates to hazards and hazardous materials, including existing hazards that may be encountered on the Project site and/or hazards that may be created by the Project. Information used in this section is derived from the City of California City General Plan, the Cortese List, and various online databases as referenced.

4.9.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Toxic Substances Control Act

The production, importation, use, and disposal of toxic substances is regulated by the U.S. Environmental Protection Agency (USEPA), as necessary, to protect human health and the environment. The Toxic Substances Control Act (TSCA) of 1976 (15 *United States Code* [USC] 2601) gives the USEPA the ability to track 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and requires reporting or testing of those that may pose an environmental or human health hazard. The USEPA also has the ability to ban the manufacture and import of chemicals that pose an unreasonable risk. In addition, the USEPA tracks thousands of new chemicals that are developed each year with either unknown or dangerous characteristics.

Accidental Release Prevention Program

Title 40, Part 68 of the *Code of Federal Regulations* (CFR) is the federal Accidental Release Prevention Program that lists regulated toxic and flammable substances and sets requirements concerning the prevention of accidental releases. This program sets threshold quantities of regulated substances at which owners or operators of a stationary source are required to prepare risk management plans. The risk management plans must contain an assessment of the risks for accidental release, prevention measures, emergency response procedures, employee training, record keeping, and incident investigations.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) serves as the basis for the proper management of hazardous and nonhazardous solid wastes. The RCRA is implemented through the following programs:

- The Solid Waste Program encourages states to develop comprehensive plans to manage non-hazardous industrial solid wastes and municipal solid wastes; sets criteria for municipal solid waste landfills and other solid waste disposal facilities; and prohibits the open dumping of solid wastes.
- The Hazardous Waste Program establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal (in effect from "cradle to grave").
- The Underground Storage Tank Program regulates underground storage tanks (USTs) containing hazardous substances and petroleum products.

The RCRA was amended by the federal Hazardous and Solid Waste Amendments (HSWAs), which phased out the land disposal of hazardous wastes; increased the enforcement authority of the USEPA; set more stringent hazardous waste management standards; and developed a comprehensive UST program. The RCRA has been further amended by the federal Facility

Compliance Act (which strengthened the enforcement of RCRA at federal facilities) and the Land Disposal Program Flexibility Act (which provided regulatory flexibility for land disposal of certain wastes).

Hazardous Materials Transportation Regulations

The Hazardous Materials Transportation Act and Hazardous Materials Transportation Uniform Safety Act provide regulatory and enforcement authority to the US Secretary of Transportation to reduce risks to life and property from hazards associated with the transport of hazardous materials. These Acts promote uniformity between different State and local highway routing regulations; develop criteria for the issuance of federal permits to motor carriers of hazardous materials; and regulate the transport of radioactive materials. Title 49, Parts 172, 173, 177, and 397 of the CFR contains the rules for labeling, packing, shipping, and transporting hazardous materials.

Federal Aviation Regulations

Title 15, Part 77 of the CFR contains the regulations governing objects that may affect navigable airspace. The regulations include standards for determining obstructions to air navigation; noticing requirements that will allow the Federal Aviation Administration (FAA) to determine if objects have the potential to affect navigable airspace, the need for aeronautical studies and determinations, and discretionary review; standard instrument approach procedures; take-off minimums; and obstacle departure procedures. These regulations apply to public and private use airports, heliports, military airports, joint-use (civil-military) airports, and seaplane bases.

State

California Accidental Release Prevention Program

The California Accidental Release Program (CalARP) was designed to minimize the risk of extremely hazardous substances that could potentially cause immediate harm to the public and the environment. CalARP requires the owner/operator of a business handling one or more regulated substances found in the *California Code of Regulations*, Title 19 Division 2, Chapter 4.5 over the State and/or federal Threshold Quantity to evaluate and determine the potential impacts of an accidental release. Under the CalARP regulations, these facilities must submit a Risk Management Plan (RMP) to the Certified Unified Program Agency (CUPA). The RMP developed by the facility must determine the potential accidental factors and the preventative measures and safeguards that should be implemented. RMPs include safety information, process hazard analysis, hazard review, operating procedures, training, maintenance, compliance audits, incident investigations, and other documentation supporting the implementation of the RMP.

The only CalARP-listed facility in the Project area is the California City wastewater treatment plant (Kern County PHSD 2018a).

California Hazardous Waste Control Act

The California Hazardous Waste Control Act (HWCA), as contained in Section 25100 et seq. of the *California Health and Safety Code*, authorizes the California Department of Toxic Substances Control (DTSC) and CUPAs to regulate facilities that generate or treat hazardous wastes. The HWCA authorizes CUPAs to conduct inspections where hazardous wastes are stored, handled, processed, disposed of, or are being treated; to maintain compliance records; to permit individuals who may perform on-site treatment of hazardous wastes; and to enforce against violations of the HWCA.

California Underground Storage Tank Regulations

The California Underground Storage Tank Regulations (Title 23, Chapter 16 of the *California Code of Regulations*) includes guidelines and standards to protect waters from hazardous substance discharges from USTs. The regulations establish construction requirements for new USTs; separate monitoring requirements for new and existing USTs; uniform requirements for unauthorized release reporting and for repair, upgrade, and closure of USTs and specify variance request procedures. The regulations also require responsible parties to remediate any unauthorized releases from USTs.

Certified Unified Program

In 1993, Senate Bill (SB) 1082 set up a program to foster effective partnerships between local, State, and federal agencies through designated CUPAs. The Certified Unified Program consolidated the administrative, permitting, inspection, and enforcement activities of the hazardous materials programs under one agency. The designated CUPA for the City is the Kern County Environmental Health Services Division (EHSD), which is part of the Kern County Public Health Services Department (PHSD).

Hazardous Materials Transportation License

Sections 31301 through 34510 of the *California Vehicle Code* contain general requirements regarding the transportation of hazardous materials and wastes. The requirements include route designation; licensing, records, and inspections; design, construction, and maintenance of cargo trucks; amounts and types of cargo and their marking, packing, and labeling; advanced notification of routes and stops; and other provisions. Based on the amount of hazardous materials and the size of the truck, the California Highway Patrol may require a Hazardous Materials Transportation License; hazard warning placards; and inspections for compliance with pertinent regulations.

Underground Utility Lines

The *California Code of Regulations* (Title 8; Section 1541, General Requirements) requires excavators to identify subsurface installations prior to an excavation and to ensure that the underground lines are marked. The excavators must receive a positive response from all known owners/operators of subsurface installations and lines. Additionally, before starting the excavation, excavators must meet with the owners/operators of high priority¹ subsurface installations that are located within ten feet of the proposed excavation area. Only qualified persons (those meeting training and competency requirements) can perform subsurface installation locating activities. Excavators must also be trained in notification and excavation activities (i.e., excavators must immediately notify the subsurface installation owner/operator of any damage discovered during or caused by excavating activities).

Pipeline Safety

The California Public Utilities Commission (CPUC) requires that natural gas and liquid petroleum gas pipeline systems are designed, constructed, operated and maintained in accordance with the safety standards set by the CPUC and the federal government. These standards are included in

Examples of "high priority" subsurface installations include high-pressure pipelines, natural gas/petroleum pipelines, and electrical lines greater than 60,000 volts.

Title 49 CFR Parts 191 through 193. General Order Nos. 58-A, 58-B, and 112-F, Divisions 1 of the *California Public Utilities Code*, and Title 1 of the *California Government Code*.

County

Kern County as a Certified Unified Program Agency

As discussed above, the Kern County EHSD is a CUPA and is responsible for implementing various hazardous material management programs in the County, except in the City of Bakersfield. The Kern County EHSD implements the following environmental and emergency management programs:

- Hazardous Materials Management and Response Plans
- CalARP
- UST Program
- Aboveground Petroleum Storage Act Program
- Hazardous Waste Generators and Hazardous Waste Tiered Treatment Programs
- California Uniform Fire Code's Hazardous Material Management Plans and Hazardous Material Inventory Statements

The Kern County EHSD also provides emergency response to hazardous material incidents, by performing the health and environmental risk assessment and substance identification.

City

California City Municipal Code

Title 6, Chapter 7 of the City's Municipal Code establishes regulations for the handling, storage and disposal of hazardous materials, including the requirement for businesses to annually disclose their use or handling of hazardous materials to the Fire Chief.

Title 4, Chapter 1, Article 2 of the City's Municipal Code prohibits the burning of any brush, grass, lumber, trash, rubbish, leaves, or other combustible material unless a written permit is obtained from the Fire Department. Any odorous or explosive material must be burned in an incinerator and only safe and sane fireworks are allowed to be sold and discharged in the City from June 28 to July 5 of each year, subject to a permit. Chapter 3 of Title 4 of the Code prohibits the firing, discharge, shooting, or use of a gun, revolver, pistol, firearm, or device designed or intended to discharge, or capable of discharging, a dangerous missile propelled by an explosive substance, unless in a permitted shooting range.

4.9.2 EXISTING CONDITIONS

The Project site is currently vacant and is not involved in the use, storage, handling or disposal of hazardous materials or hazardous wastes. Review of aerial photographs and topographic maps shows that the site has been vacant and undeveloped as early as 1943 (NETR 2018). No structures or activities are known to have historically been built or have occurred on the site. Aside from the existing adjacent California City Correctional Center (CCCC), which was built and improved from 1999 to 2013, adjacent lands are also vacant and have been vacant/undeveloped as early as 1943.

Hazardous material use at the adjacent CCCC include cleaning solvents, paints and other substances used for operation and maintenance of the facility. There are also two aboveground propane tanks (for heating, cooking and other equipment) and an aboveground diesel fuel tank (for emergency generators) at the eastern portion of the CCCC parking lot.

Review of the California DTSC's Envirostor database indicated that two investigation sites are located in the City, one of which requires no further action and the other has no action required. Also, there are two hazardous wastes sites to the northwest of the site that have cases closed; one site to the southwest (in Mojave) subject to active remediation; and four sites in Boron to the southeast (one site where no action is required and three other sites that are inactive but need evaluation). However, neither the active site nor the ones needing evaluation are within five miles of the Project site (DTSC 2020). Review of the USEPA's Envirofacts database and Enviromapper also shows that are no hazardous material generators within five miles of the Project site (USEPA 2020).

Review of the State Water Resources Control Board's Geotracker for sites that may have impacted groundwater quality in California shows four sites in California City. These include the California City Wastewater Treatment Facility, Pioneer Arco, a private residence on Moss Avenue, and the Silver Saddle Ranch and Club. The residence, Arco gas station, and Silver Saddle Ranch and Club had leaking underground storage tanks for which clean-up activities have been completed and the cases closed. The City's Wastewater Treatment Facility has been given Waste Discharge Requirements (WDR) under the authority of the Lahontan Regional Water Quality Control Board. A site in Boron and another in Mojave are under investigation or remediation. USTs are located at scattered locations but not near the site (SWRCB 2018).

There are no hazardous material pipelines on or near the site. The nearest pipelines are two natural gas pipelines owned by Pacific Gas and Electric Company (PG&E) running along State Route (SR) 58 (9.5 miles south of the site) and turning north to the mining site in Boron and south to Edwards Air Force Base (EAFB). Another natural gas pipeline owned by PG&E runs along SR 395, east of the site (PHMSA 2018). The Southern California Gas Company (SoCalGas) also has a high-pressure distribution pipeline generally running northerly near SR 14 and then turning east toward the central core of the City (SoCalGas 2020).

4.9.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Hazards and Hazardous Materials if it would:

Threshold 4.9a: Create a significant hazard to the public or the environment through the

routine transport, use, or disposal of hazardous materials.

Threshold 4.9b: 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.

Threshold 4.9c: Emit hazardous emissions or handle hazardous or acutely hazardous

materials, substances, or waste within one-quarter-mile of an existing or

proposed school.

Threshold 4.9d: Be located on a site which is included on a list of hazardous materials sites

compiled pursuant to Government Code Section 65962.5 and, as a result,

would it create a significant hazard to the public or the environment.

Threshold 4.9e: For a project located within an airport land use plan or, where such a plan

has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or

working in the project area.

Threshold 4.9f: Impair implementation of or physically interfere with an adopted emergency

response plan or emergency evacuation plan.

Threshold 4.9g: Expose people or structures, either directly or indirectly, to a significant risk

of loss, injury, or death involving wildland fires.

4.9.4 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirements (RR):

RR HAZ-1 Hazardous materials and hazardous wastes shall be transported in compliance with any applicable State and federal requirements, including the U.S. Department of Transportation regulations listed in the *Code of Federal Regulations* (Title 49, Hazardous Materials Transportation Act); and California standards in Vehicle

Code Sections 31301 through 34510.

Hazardous waste generation, transportation, treatment, storage, and disposal shall be conducted in compliance with the *California City Municipal Code* and Subtitle C of the Resource Conservation and Recovery Act (RCRA) (*Code of Federal Regulations*, Title 40, Part 263), including the management of non-hazardous solid wastes and underground tanks storing petroleum and other hazardous substances. Hazardous materials shall also be used, stored and handled in accordance with the regulations of the Kern County EHSD, which serves as the designated CUPA and which implements State and federal regulations for the following programs: (1) Hazardous Materials Management and Response Plans, (2) CalARP, (3) UST Program, (4) Aboveground Petroleum Storage Act Program, (5) Hazardous Waste Generators and Hazardous Waste Tiered Treatment Programs, and (6) California Uniform Fire Code's Hazardous Material Management Plans and Hazardous Material Inventory Statements.

RR HAZ-3 Construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, shall be designed and constructed in accordance with the *California Code of Regulations* (Title 8, Section 1541). This requires notification of nearby utility line operators and prevention of accidental damage to underground utility lines.

RR HAZ-4 The natural gas lines and system improvements shall be designed, constructed, operated, and maintained by the SoCalGas Company in accordance with State and federal regulations, and as reviewed, approved and inspected by the CPUC.

4.9.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.9a: Would the project create a significant hazard to the public or the

environment through the routine transport, use, or disposal of

hazardous materials?

Threshold 4.9b: Would the project 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?

Short-Term On-site Construction Impacts

Construction vehicles and equipment use at the proposed Project site would involve the short-term use of small amounts of hazardous materials including, but not limited to, fuels, lubricating oils, solvents, antifreeze, hydraulic fluid, and compressed gases. In addition, construction activities would utilize some hazardous materials, such as paints and solvents, and would generate hazardous wastes such as waste oil and containers that previously held hazardous materials. The potential exists for an accidental release of hazardous materials during construction activities and hazardous materials transport related to construction.

Project-related construction activities also have the potential to result in exposure to these hazardous materials by workers, or by the public, if access to the construction site is not adequately controlled or if the materials are not properly handled and contained. Potential hazards to workers, the public, and the environment from the routine use, transport, or disposal of hazardous materials for Project construction would be reduced to the maximum extent practicable through adherence to existing pollution prevention, waste management, worker health and safety, and transportation safety regulations that would apply to the Project.

Contractors would need to comply with existing regulations, including RR HAZ-1 for proper hauling and transport of hazardous materials and wastes, and RR HAZ-2 for proper hazardous materials handling, waste management, and accidental release protocol. Additionally, as discussed further in Section 4.10, Hydrology and Water Quality, the Project would be required to obtain coverage under an National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water. In order to obtain coverage under the NPDES Construction General Permit, as stated in RR HYD-1, the Project's construction contractor would be required to prepare and implement an SWPPP, which must include erosion-control and sediment-control BMPs, wind and water tracking controls, hazardous material management practices, and other sitemanagement BMPs. These BMPs would include measures to effectively prevent or minimize pollutants from being discharged in storm water, including but not be limited to measures for proper containment of hazardous materials and inspections to ensure the BMP practices are in place and effective.

With compliance with the applicable RRs, potential impacts to the public or the environment during short-term construction related to the transport, use, or disposal of hazardous materials and the potential release of hazardous materials into the environment would be less than significant.

Long-Term On-site Operational Impacts

In the long term, operation and maintenance of the proposed Project would include the handling of hazardous materials (e.g., medical chemicals, paints, paint thinners, cleaning solvents, pesticides, motor oil, diesel gasoline, and automotive substances) and/or the generation of

hazardous wastes that can lead to the accidental release of these materials (i.e., spills, leaks, misuse, and accidents) and the potential contamination of underlying soils and/or groundwater.

The transport of hazardous materials to the site (i.e., medical chemicals, diesel fuel, solvents and other chemicals for facility maintenance) would have to be made in compliance with existing regulations (RR HAZ-1). Use, storage, and disposal of these hazardous materials would also have to comply with existing regulations (RR HAZ-2).

Emergency back-up diesel generators would be provided on-site, which would include an aboveground or an underground fuel storage tank. The fuel storage tank would have to be constructed, used, and monitored in accordance with existing regulations as implemented by the Kern County EHSD (RR HAZ-2). This will include the provision of corrosion protection, overfill prevention, spill prevention, and release detection features and systems, as well as corrective action for leaks.

Compliance with various State, regional, and federal regulations on storage, use, handling, transport, or disposal of hazardous materials and hazardous wastes (RR HAZ-1 and RR HAZ-2) would prevent undue hazards. With compliance with the RRs, impacts would be less than significant. No mitigation is required.

Short-Term and Long-Term Off-site Impacts

Construction of the proposed access road, utility infrastructure improvements, and public facility upgrades would involve the same hazards associated with construction activities as discussed above. As stated, compliance with applicable regulations (RR HAZ-1 and RR HAZ-2) would render impacts to be less than significant.

While there are no major pipelines along the proposed alignments of new utility lines, there may be other pipelines and high priority lines along or across these alignments. Trenching, excavation and construction of the new utility lines may disturb or affect the integrity of existing pipelines. In order to prevent impacts to pipelines and other high priority lines that may be present within or near the proposed sewer and natural gas lines and other utility trenching and connections, compliance with RR HAZ-3 would require notification of the owner/operator of the existing utility lines to avoid damage to high priority lines.

Long-term use of the access road and utility lines would not involve hazardous materials use or hazardous waste generation. Use of the public facilities that would be improved as part of the project would not involve any major or new hazardous materials use or hazardous waste generation that is not already occurring at these facilities. Compliance with existing regulations would prevent the creation of public hazards. Impacts would be less than significant and no mitigation is required.

Threshold 4.9c:

Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school?

On-Site Impacts

There are no schools located within 0.25 mile of the proposed Project site. The nearest school is Hacienda Elementary School, located at 19950 Hacienda Boulevard (approximately 6.2 miles southwest of the Project site). Other schools in the surrounding area are mainly located near the City's central core to the west and to the south in the community of Boron. As discussed in Threshold 4.9a above, hazardous materials use would occur during construction and operation

of the Project, and these hazardous materials and hazardous wastes would be used, stored, handled, and disposed of in accordance with applicable regulatory requirements (RR HAZ-1 and RR HAZ-2) and thus, would not have a significant adverse effect on adjacent land uses or more distant schools. Also, construction traffic (including trucks carrying hazardous materials or wastes) would mainly use Twenty Mule Team Parkway and other major roadways to reach SR 395, SR 58, and SR 14; and would not pass through local streets where schools are located.

Off-Site Impacts

The off-site improvements to the City's wastewater treatment plant (WWTP) and water system Phase 1 booster pumping station (BPS) and new water, sewer, power and telecommunications lines and access road that would be constructed to serve the proposed Project would not be located near existing schools. The proposed natural gas pipeline located off-site on Twenty Mule Team Parkway, Randsburg Mojave, and California City Boulevard between Randsburg Mojave Road to the intersection with Yerba Boulevard would be located within a quarter mile of Robert P. Ulrich Elementary School, located at 9124 Catalpa Avenue, is approximately 0.20 mile south of the proposed natural gas pipeline in California City Boulevard, near 90th Street. The proposed gas line and system improvements would be constructed in accordance with CPUC regulations (RR HAZ-4), to prevent undue hazards from potential leaks, fires, explosions along the length of the natural gas pipeline and would not emit hazardous emissions or materials. Impacts to schools would be less than significant and no mitigation is required.

Threshold 4.9d:

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

On-Site Impacts

There are no sites or facilities in the City that are included in the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to Government Code Section 65962.5. The proposed Project site is not listed in government databases as a past or current hazardous materials user or hazardous waste generator. Also, there are no hazardous materials users or hazardous waste generators near the site that are listed in government databases.

While the Project would utilize hazardous materials for maintenance and operation of the facility, this use would be conducted in accordance with pertinent federal, State, County and local regulations. Impacts related to future hazardous materials use at the site would be less than significant with compliance with the RRs listed above.

The use, handling, storage, transport, and disposal of hazardous materials and wastes at the adjacent CCCC is conducted in accordance with pertinent regulations and would not pose safety hazards to the Project. The CCCC is located downstream from the proposed Project site and would be separated from the proposed Project by drainage retention basins and a surface parking lot that would serve as buffers to minimize any hazard at the CCCC from affecting the inmates, employees, and visitors of the proposed Project. Impacts would be less than significant and no mitigation is required.

Off-Site Impacts

The off-site sewer, natural gas, water, power, and telecommunication lines that would be constructed to serve the proposed Project would be located on public rights-of-way and would not

be located on sites that are included in the Cortese List or sites listed in government databases as utilizing hazardous materials or generating hazardous wastes. Proposed improvements to the Phase 1 BPS and the new access road would also not be located on sites included in the Cortese List. However, the WWTP is listed as a CalARP facility for the use of chlorine, a regulated substance (Kern County PHSD 2017a). The Project may increase the use of chlorine due to the increase in the wastewater volume requiring treatment at the WWTP but the proposed improvements at the WWTP would not change current operating procedures. The plant operations would also continue to be subject to the WDR imposed by the RWQCB.

No impacts related to sites on the Cortese List would occur and no mitigation is required.

Threshold 4.9e:

For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

On-Site Impacts

There are no airports or airstrips within two miles of the proposed Project site. The nearest airport to the site is the California City Municipal Airport, located 8.6 miles west of the site. The Project site is located outside the area included in the comprehensive land use plan for this airport (Kern County 2012a). The EAFB is located approximately 10 miles to the south and the Boron Airstrip is located 17 miles to the southeast.

A 20,000-square-mile area north of EAFB is designated as the Joint Services Restricted R-2508 Complex and includes the Project site and all of California City, as well as parts of Kern, Inyo, Mono, Los Angeles, San Bernardino, and Tulare counties. The restricted airspace for the R-2508 Complex extends from the ground surface to an unlimited altitude (EAFB 2016). This area is restricted to the use of the airspace by military aircraft, with prior approval required for airspace use by civilian aircraft. Several specific restricted airspace areas are located within the R-2508 Complex (California City 2009).

The Project does not propose the use of aircraft nor will it create a demand for air transportation. No helipad or heliport is proposed on-site. Building heights would not exceed 45 feet but outdoor security lighting would have 100-foot tall light masts. These masts would be similar to those at the CCCC and would extend into the restricted airspace for the R-2508 Complex on the site; and thus, would have the potential to adversely affect aircraft operations at EAFB. The Kern County Airport Land Use Plan requires notification of the EAFB for developments within 25 miles of the base; projects that may affect visibility or introduce elevated obstructions within 25 miles of the R-2508 complex; structures within 75 miles of the R-2508 complex that are at least 50 feet tall; and projects within 50 miles of the complex that emit radio and communication frequencies (Kern County 2012a).

To ensure that no hazards would be created by the Project, notifications shall be sent to and clearances shall be obtained from both FAA and EAFB for Project compliance with FAA regulations and to allow EAFB to evaluate the impacts of the proposed structures and site improvements on aircraft operations (MM HAZ-1). Compliance with the conditions of these clearances would avoid the creation of hazards to aircraft operations at the EAFB. To further prevent hazards to aircraft operations within the restricted airspace for the R-2508 Complex, exterior lights shall be shielded and directed downward into the site (MM HAZ-2). In addition, the Developer shall grant an Avigation Easement to the U.S. Air Force for the continued use of airspace above the site for flight testing (MM HAZ-3). The easement would provide the EAFB with the right-of-way for free and unobstructed passage of aircraft through the airspace over the site;

the right to prohibit construction of any structure, tree or other object that would enter the acquired airspace; and a right-of-entry to the site, with advance notice, to remove, mark, or light any structure or other object that enters the acquired airspace (Kern County 2012a).

Airport safety hazards to EAFB operations and to inmates or people working at or visiting the Project would be less than significant after the implementation of MM HAZ-1 through MM HAZ-3.

Off-Site Impacts

The off-site improvements to the Phase 1 BPS and new water, sewer, power, telecommunication, and natural gas lines and access road that would be constructed to serve the proposed Project would be located at-grade, underground on public rights-of-way, or only several feet aboveground where other existing structures are taller at the Phase 1 BPS site. Thus, they would not pose hazards related to aircraft operations at EAFB. No impacts would occur and no mitigation is required.

Threshold 4.9f:

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

On-site Impacts

Construction activities at the site would not affect emergency response or evacuation at the adjacent CCCC since construction would be confined to the site and the proposed Project would not affect access points to and from the existing CCCC. Virginia Boulevard, Gordon Boulevard, and Twenty Mule Team Parkway would remain accessible during construction activities.

The Project site would be served by a new access road north of the CCCC that would connect to Virginia Boulevard and provide emergency access and evacuation for the Project. In the event of a disaster, disturbance, or emergency, the emergency plans and procedures that have been developed for the Project would be followed, in accordance with the American Correctional Association (ACA) standards and as applicable and required by Title 15 of the *California Code of Regulations* and US Bureau of Prison policies and program statements for federal facilities, as necessary. In addition, the California City Fire and Police Departments would also review the Project's building plans to ensure that adequate access for emergency vehicles and evacuation routes are available at the proposed Project site, as required by the City's Fire Code (RR PS-1 in Section 4.14, Public Services and Recreation).

The Kern Multi-Jurisdiction Hazard Mitigation Plan (HMP) was adopted by the City of California City on June 17, 2014. The HMP identifies the potential hazards in the County and assesses the risks and vulnerabilities across the planning area. The HMP also sets goals and objectives based on the risk assessment and includes specific recommendations to mitigate disaster losses (Kern County 2012b). The Project would not conflict with the actions identified for California City (which include the replacement of water pumping systems, as necessary) and would not obstruct implementation of the HMP. No adverse impacts would occur.

Off-Site Impacts

Installation of the new pump at the City's Phase 1 BPS and improvements to the WWTP would be confined to these sites and would not affect emergency response or emergency evacuation of adjacent sites or land uses. The new access road would be located along the easterly extension of Gordon Boulevard, north of the existing CCCC. This area is not used for emergency access or evacuation by the CCCC. During short-term construction activities for the new water, sewer,

power, telecommunications, and natural gas lines on public rights-of-way, potential travel lane obstruction may occur but would be minimized by compliance with the City's regulations and encroachment permit conditions (RR TRA-1 in Section 4.16, Traffic and Transportation), which requires the implementation of temporary traffic-control measures for the maintenance of access to individual lots; vehicle traffic and pedestrian safety; reduced congestion and traffic flow interruptions; and notification of emergency personnel. Also, this obstruction would be temporary as each utility line and segment is under construction.

In the long-term, no change to the existing roadways and their alignments are proposed by the off-site utility and public facility improvements. Therefore, no change in emergency access or emergency evacuation routes would occur with the proposed Project.

Impacts related to emergency response and evacuation would be less than significant, and no mitigation is required.

Threshold 4.9g: Would the project expose people or structures, either directly or

indirectly, to a significant risk of loss, injury, or death involving

wildland fires?

On-site Impacts

Sections 4201–4204 of the *California Public Resources Code* and Sections 51175 –51189 of the *California Government Code* direct the California Department of Forestry and Fire Protection (CalFire) to map areas of significant fire hazards. The maps identify Fire Hazard Severity Zones (Very High, High, and Moderate) where the application of various mitigation strategies is needed to reduce risks associated with wildland fires. The Fire Hazard Severity Zones were developed using a computer model that factors in the fire history; existing and potential fuel (natural vegetation); flame length; blowing embers; terrain; and typical weather for an area. The severity of the hazard is based on a likelihood that, over a 30- to 50-year period, an area will burn without fuel-reduction efforts. Given the results of the modeling, the State identifies an area as a "moderate", "high", or "very high" Fire Hazard Severity Zone.

The proposed Project site is not located within a Very High Fire Hazard Severity Zone. The site and the City are identified to have a Moderate hazard and the Project site is at least 20 miles from the edge of the Very High Fire Hazard Severity Zones at the Sierra Nevada Mountains to the west (CalFire 2007). However, brush fire hazards are possible at the undeveloped site and adjacent undeveloped areas to the north, east, south, and southwest of the site.

The Project would lead to the removal and clearing of existing vegetation on the site, eliminating the potential for brush fires. The Project would also be built in accordance with the City's Fire Code (RR PS-1) and would not create fire hazards. Compliance with Title 4 of the City's Municipal Code on burning activities and the use of explosive materials would also avoid the potential for accidental fires. In addition, no uses or activities are proposed by the Project on the site that may lead to brush fires at the surrounding areas. Impacts would be less than significant, and no mitigation is required.

Off-Site Impacts

The proposed access road, utility lines and public facility improvements would be located in areas identified to have a Moderate hazard. Improvements at the City's WWTP and Phase 1 BPS would be located on areas that are free of brush vegetation. The proposed access road and water, telecommunications, sewer, natural gas, and power lines may include the removal and clearing of existing vegetation, eliminating the potential for brush fires on the proposed access road. The

utility lines would also be located on dirt roads with limited vegetation. Brush fire hazards near these utility line alignments would not affect the proposed underground utility lines. Impacts would be less than significant, and no mitigation is required.

4.9.6 CUMULATIVE IMPACTS

The cumulative impacts related to hazards and hazardous materials are analyzed for the City and surrounding areas. Existing developments in the City and surrounding areas pose risks to public health and safety, if they involve the use, storage, handling, generation, transport, and disposal of hazardous materials and wastes. The proposed Project and future growth and development in the City and surrounding areas would increase these risks as more facilities and urban activities/operations utilize hazardous materials and/or generate hazardous wastes.

Hazardous material spills, fire, and/or explosions and soil/groundwater contamination may potentially occur with land uses or developments that handle these materials in large quantities. However, there are numerous regulations that serve to protect public health and safety at all levels of government. Federal, State, and County agencies and the City are responsible for regulating hazardous materials use, storage, handling, generation, transport, and disposal throughout the City and surrounding areas. Monitoring and enforcement by the Kern County EHSD, as the CUPA, would ensure compliance with existing regulations and would reduce the potential for public health and safety hazards.

The Project would comply with existing regulations and would implement mitigation measures to reduce impacts to aircraft operations in the area. Compliance by other projects with pertinent regulations would preserve public health and safety and would prevent the creation of health risks and public safety hazards. Therefore, the Project and future development in the City and surrounding areas are not expected to present cumulative and significant risks to public health and safety.

Proposed developments would be subject to review and approval by the City and Kern County Fire Departments for fire safety and preparedness, as well as the provision of adequate emergency access and evacuation. Compliance with pertinent requirements of these Fire Departments would prevent the creation of fire hazards and would reduce public safety hazards. Future development projects in the area would also need to be made part of emergency planning efforts for natural or manmade disasters that may occur in the County. Cumulative adverse impacts would be less than significant.

4.9.7 MITIGATION MEASURES

- MM HAZ-1 The Project Applicant/Developer shall send notifications of the proposed Project and shall obtain clearances from the Federal Aviation Administration (FAA) and the Edwards Air Force Base (EAFB) to ensure that the proposed structures (e.g., buildings, fences, observation towers, light masts, etc.) would not pose hazards to aircraft operations at EAFB.
- MM HAZ-2 The proposed exterior lights at the Project shall be shielded and directed downwards into the site and shown in building and site development plans that would be subject to review and approval by the City, FAA and EAFB.
- MM HAZ-3 The Project Applicant/Developer shall grant an avigation easement over the project site to the U.S. Air Force.

4.9.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Direct, indirect, and cumulative impacts related to hazards and hazardous materials would be less than significant after the implementation of MM HAZ-1 through MM HAZ-3 and compliance with RR HAZ-1 through RR HAZ-4. No significant unavoidable direct, indirect, or cumulative impacts related to hazards or hazardous materials would occur.

4.9.9 REFERENCES

- California City, City of. 2009 (October 6). City of California City Final General Plan. California City, CA: City of.
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4.10 HYDROLOGY AND WATER QUALITY

This section analyzes the proposed Correctional Facility at California City's (CFCC) (also referred to as the Project or the proposed Project) potential impacts on hydrology and water quality.

4.10.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Clean Water Act and National Pollutant Discharge Elimination System

In 1948, the Federal Water Pollution Control Act was adopted to address water pollution. It became the Clean Water Act (CWA) in 1972 and was subsequently amended in 1977 to establish the National Pollutant Discharge Elimination System (NPDES) Program, which regulates the discharge of pollutants into "waters of the U.S." from point sources. In 1987, the CWA was again amended to require that the U.S. Environmental Protection Agency (USEPA) establish regulations for non-point sources, such as municipal and industrial discharges of storm water and non-storm water. The USEPA published final regulations for storm water and non-storm water discharges on November 16, 1990. The regulations require that municipal separate storm sewer system (MS4)¹ discharges to surface waters be regulated by an NPDES permit.

In addition, the CWA requires States to adopt water quality standards for water bodies. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with the water quality criteria necessary to support those beneficial uses. Water quality criteria are prescribed concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water necessary to support a particular beneficial use.

Rather than setting numeric effluent limitations for storm water and urban runoff, CWA regulations call for the implementation of Best Management Practices (BMPs) to reduce or prevent the discharge of pollutants from various activities to the Maximum Extent Practicable (MEP) for urban runoff and meeting the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) standards for construction storm water. Regulations and permits have been implemented at the federal, State, and local level to form a comprehensive regulatory framework to serve and protect the quality of the nation's surface water resources.

Because California has not established a complete list of acceptable water quality criteria, the USEPA established numeric water quality criteria for certain toxic constituents in the form of the California Toxics Rule (*Code of Federal Regulations*, Title 40, Section 131.38), which is discussed below.

Federal Anti-Degradation Policy

The Federal Anti-Degradation Policy (40 Code of Federal Regulations [CFR] 131.12) requires States to develop anti-degradation policies and identify methods for implementing them. Pursuant to this policy, State anti-degradation policies and implementation methods are required, at a minimum, to protect and maintain (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses,

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MS4s are systems of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) used for collecting or conveying storm water (but not wastewater or combined sewage) that are owned or operated by a public agency with jurisdiction over the disposal of sewage, industrial wastes, storm water, or other wastes.

unless the State finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

State

California Porter-Cologne Act

The Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) grants the State Water Resource Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) broad powers to protect water quality in the State and to implement California's responsibilities under the CWA. Under the Porter-Cologne Act, the SWRCB and the RWQCBs are responsible for (1) adopting plans and policies for water quality control; (2) regulating discharges to surface water and groundwater; (3) regulating waste disposal sites; and (4) requiring the cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, and oil or petroleum products.

Each RWQCB has adopted a water quality control plan (or basin plan) for its region to reflect the policies in the Porter-Cologne Act and other State policies for water quality control. These plans include water discharge prohibitions applicable to particular conditions, areas, or types of wastes within the region. The RWQCBs implement the plans by (1) enforcing set discharge limitations; (2) preventing violations of the limitations; and (3) conducting investigations to determine the quality of any "waters of the State". Civil and criminal penalties are imposed on persons who violate the requirements of the Porter-Cologne Act or any SWRCB/RWQCB order.

California Anti-Degradation Policy

The California Anti-Degradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Anti-Degradation Policy, the California Anti-Degradation Policy applies to all "waters of the State", not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual basin plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect the present or anticipated beneficial uses of such water resource.

California Toxics Rule

In 2000, the USEPA promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to "waters of the State". The USEPA promulgated this rule based on its determination that numeric criteria are necessary in the State to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries that are designated by the RWQCBs as having beneficial uses protective of aquatic life or human health.

Construction General Permit Order No. 2009-0009-DWQ, as amended

Pursuant to Section 402(p) of the CWA, the SWRCB issued a Statewide NPDES General Permit for storm water discharges from construction sites (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ) (SWRCB 20018b). The SWRCB's NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities is referred to as the "Construction General Permit". Under the Construction

General Permit, construction sites with a disturbed area of one acre or more or projects that disturb less than one acre but are part of a larger common plan of development are required to either obtain individual NPDES permits for storm water discharges or to be covered by the Construction General Permit (SWRCB 2009).

Coverage under the Construction General Permit requires submission of Permit Registration Documents (PRDs), which include a Notice of Intent (NOI), a construction site risk assessment to determine appropriate coverage level, and a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include BMPs to be implemented during construction, site maps, a Construction Site Monitoring Program (CSMP), and sediment basin design calculations. The primary objective of the SWPPP is to ensure that the responsible party properly constructs, implements, and maintains the BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site. The SWPPP shall also outline the monitoring and sampling program to verify compliance with discharge Numeric Action Levels (NALs) set by the Construction General Permit. In addition, the Construction General Permit includes post-construction requirements for projects to match pre-project runoff volume through the use of non-structural or structural measures. For sites larger than two acres, a project shall also maintain the site's pre-project runoff rate.

Title 24 Green Building Standards Code

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality (CBSC 2020). In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others.

Regional

Water Quality Control Plan for the Lahontan Region

The Project site and the City of California City (City) are within the jurisdictional boundaries of the Lahontan RWQCB. The Water Quality Control Plan for the Lahontan Region (Lahontan Basin Plan), which was first adopted in 1995 and subsequently revised through the years, designates

the present and potential beneficial uses and water quality objectives for surface and groundwater bodies in the region, with specific water quality standards for the Lake Tahoe basin. The Lahontan Basin Plan also identifies water quality problems that can threaten beneficial uses in the region. Required or recommended control measures for water quality problems and discharge prohibitions are included in the Basin Plan. Water quality objectives for point source pollutants are achieved through Waste Discharge Requirements (WDRs) and NPDES permit programs, while water quality objectives for non-point source pollutants are achieved through pollution prevention through local regulations; discharge prohibitions; public outreach programs; implementation of BMPs; Section 401 Water Quality Certification programs; and investigations, cleanup, and regulatory enforcement actions, as necessary.

Fremont Valley Basin Groundwater Management Plan

The Fremont Valley Basin Groundwater Management Plan (Groundwater Management Plan) was prepared for the Fremont Valley Basin (Basin). The Basin is used as the primary supply source in the Groundwater Management Plan area, in addition to imported surface water and recycled water generated by the California City's Wastewater Treatment Plant (WWTP). The primary goal of the Groundwater Management Plan is to document the groundwater conditions for the Basin that would help to provide information for future decisions regarding long-term sustainable management of groundwater resources in the Groundwater Management Plan area.

City

Municipal Code CalGreen Code

Title 8 of the City Municipal Code, which is the City Building Code, incorporates (and adopts by reference) the most current edition of the California Building Code (CBC). Part 11 of the CBC is the California Green Building Standards Code (CalGreen Code).

4.10.2 EXISTING CONDITIONS

Surface Hydrology

The Project site is located within the Koehn Lake watershed, which is a closed basin southeast of the Tehachapi Mountains. Storm water flows in this watershed generally flows westerly and northerly into Koehn Lake, a dry lake between the El Paso and Rand Mountains (approximately 10 miles northwest of the site). There is no developed storm drain system serving the site and the surrounding area. Storm water generally percolates into the bare soils of undeveloped lands, with storm water overflows towards Cache Creek and into Koehn Lake during heavy rains. Storm water on the undeveloped Project site percolates into the ground, with runoff sheet flowing toward the southwest based on the local topography.

Water Quality

Water bodies that do not meet water quality standards are considered "impaired" under Section 303(d) of the CWA, and responsible RWQCBs are required to develop total maximum daily loads (TMDLs) for the impairing pollutants. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (with a factor of safety). Once established, the TMDL is allocated among current and future pollutant sources that discharge to the water body. There are no 303(d) water bodies near the site or in areas downstream of the site (SWRCB 2018a).

Groundwater Resources

The City overlies the Fremont Valley, Antelope Valley, and Harper Valley groundwater basins but the Fremont Valley Groundwater Basin underlies the developed areas of the City and is the main source of the City's water supply (Woodard & Curran 2018). This basin covers approximately 335,000 acres and underlies Fremont Valley in the eastern section of Kern County and the northwestern section of San Bernardino County. This basin is bound on the northwest by the Garlock Fault; various hills and mountains on the east; and by the Antelope Valley Groundwater Basin on the southwest (DWR 2004). It has a trough shape and dips from its north and south ends to the lowest area in the central portion near the Koehn Lake (Stetson Engineers 2009). The underlying alluvium and lacustrine deposits in the groundwater basin are water bearing. Alluvium is about 1,190 feet thick and groundwater in the alluvium is generally unconfined. The basin has an average well yield of 530 gallons per minute (gpm) and maximum yields of 2,580 to 4,000 gpm (DWR 2004).

Percolation of surface water at ephemeral streams from the Sierra Nevada Mountains is the primary source of natural recharge of the groundwater basin. The groundwater has variable mixtures of sodium, calcium chloride, sulfate and bicarbonate and there are high concentrations of fluoride and sodium in parts of the basin. However, well monitoring indicates that water quality in public supply wells do not have concentrations above the established maximum contaminant levels for inorganics, radiological contaminants, nitrates, pesticides, volatile organic compounds or semi volatile organic compounds (DWR 2004).

The Fremont Valley Groundwater Basin consists of the Mojave City Subbasin and the California City Subbasin. The City obtains the majority of its potable water from groundwater pumped from the California City Subbasin. This subbasin was estimated to contain 4.4 million acre-feet of water in 2007. Natural recharge to the Basin has two sources: recharge of this subbasin by direct percolation of precipitation on the valley floor and runoff from the surrounding tributary watersheds (Woodard & Curran 2018). Recharge also occurs from underflow in the creek channels that emerge from the mountains. Runoff from surrounding watersheds and subsurface flow is 16,200 acre-feet per year and is considered the average safe yield (Stetson Engineers 2009).

4.10.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Hydrology and Water Quality if it would:

Threshold 4.10a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Threshold 4.10b: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Threshold 4.10c: Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would

- (i) result in substantial erosion or siltation on- or off-site;
- (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

(iv) impede or redirect flood flows?

Threshold 4.10d: Result in flood hazard, tsunami, or seiche zones, risk release of pollutants

due to project inundation.

Threshold 4.10e: Conflict with or obstruct implementation of a water quality control plan or

sustainable groundwater management plan.

4.10.4 PROJECT DESIGN FEATURES

The following Project Design Feature (PDF) would be implemented as part of the Project design:

PDF HYD-1 The Project will include the construction of a series of stormwater retention basins along the western section of the site. These basins have been designed to accommodate the volume of stormwater from a 10-year 5-day storm event and would promote the infiltration of storm water into the ground or its evaporation, as well as remove pollutants from the runoff.

4.10.5 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirement (RR):

RR HYD-1 The Project will be constructed in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, Order No 2009-0009-DWQ, NPDES No. CAS000002 (or the latest approved Construction General Permit). Compliance requires filing a Notice of Intent (NOI); a Risk Assessment; a Site Map; a Storm Water Pollution Prevention Plan (SWPPP) with proposed construction site Best Management Practices (BMPs); an annual fee; and a signed certification statement.

4.10.6 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.10a: Would the project violate any water quality standards or waste

discharge requirements or otherwise substantially degrade surface

or groundwater quality?

Short-Term On-Site Construction Impacts

The Project would involve construction activities that would generate pollutants that may enter storm water runoff. Storm water runoff from the site could contain pollutants (e.g., loose soils and sediments from grading and excavation activities) and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that may be generated by construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment. These pollutants may enter the storm water runoff that flows to off-site areas

Drainages in the vicinity of construction areas of the proposed Project could be impacted, resulting in changes in water quality that could affect plant and wildlife species using adjacent habitat. This is discussed in Section 4.4, Biological Resources, of this Environmental Impact Report (EIR). Construction BMPs implemented in compliance with the NPDES would reduce pollutants in the runoff and impacts on stormwater quality.

As stated in RR HYD-1, the Project's construction contractor would be required to obtain coverage under the NPDES Construction General Permit. This permit requires the discharger to perform a risk assessment for the proposed development (with differing requirements based upon the determined risk level) and to prepare and implement an SWPPP, which must include erosion-control and sediment-control BMPs, wind and water tracking control BMPs, hazardous material management practices, and other site-management BMPs that would meet or exceed measures required by the determined risk level of the Construction General Permit. Compliance with the requirements of the NPDES Construction General Permit would ensure that construction of the Project would not violate water quality standards or substantially degrade water quality. Thus, short-term construction impacts on water quality would be less than significant, and no mitigation is required.

Long-Term On-Site Operational Impacts

Wastewater and sewage from the Project would be disposed into the sewer system and would not affect surface or groundwater quality at the site (see Section 4.18, Utilities and Service Systems). Hazardous materials would be used, stored and disposed in accordance with applicable regulations, as discussed in Section 4.9, Hazards and Hazardous Materials, of this EIR. Potential storm water pollutants that could be generated by operation of the Project would come from proposed drive aisles and parking areas and other outdoor activity areas. Pollutants of concern that may be generated by the Project include, but may not be limited to:

- Sediments (Total Suspended Solids [TSS] and Turbidity). Excessive erosion, transport, and deposition of sediment in surface waters can impair receiving water quality.
- **Nutrients (Nitrogen and Phosphorus).** Nutrients are inorganic forms of nitrogen and phosphorus. Sources of nutrients in runoff include fertilizers from landscaped areas, atmospheric deposition, and vehicular emissions.
- Trace Metals (Copper, Lead, Zinc). The primary anthropogenic sources of trace metals in storm water are commercially available metals used in transportation, buildings, and infrastructure. Metals are also found in fuels, adhesives, paints, and other coatings, and are found naturally as a part of minerals in geologic formations.
- **Petroleum Hydrocarbons.** The sources of oil, grease, and other petroleum hydrocarbons include spillage of fuels and lubricants; discharge of domestic and industrial wastes; atmospheric deposition; and runoff contaminated by leachate from asphalt roads, wearing of tires, and deposition from vehicular exhaust.
- Trash and Debris. Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic debris (such as leaves, grass cuttings, and food waste) are general waste products that can be entrained in runoff.

There are no 303(d) water bodies near the site or in areas downstream of the site, and therefore, there are no applicable TMDLs for water quality in the project vicinity.

In compliance with the Construction General Permit and as stated under PDF HYD-1, the on-site storm drainage system would include a series of retention basins along the western section of the

site that would accommodate storm water from the rest of the site. The proposed on-site basins would reduce the peak storm water runoff discharge volume and rate, as well as remove storm water pollutants by allowing the percolation or evaporation of storm water, as well as the settlement of pollutants. Overflows from the basins would be westerly from the most southern basin toward the undeveloped areas south of the existing California City Correctional Facility (CCCC), mimicking existing conditions.

Exhibit 3-2, Grading Plan, in Section 3.0, Project Description, shows the proposed location of retention basins. Table 4.10-1 provides the capacity of each retention basin.

TABLE 4.10-1
PROPOSED RETENTION BASINS

Retention Basin	Capacity
1	6,300 cy
2	15,600 cy
3	16,400 cy
4	20,600 cy
5	12,300 cy
Total Capacity	71,200 cy
Cy:cubic yards	
Source: Psomas 2017	

Implementation of PDF HYD-1 and compliance with RR HYD-1 would ensure that storm water pollutants generated at the Project site would be minimized and would not adversely affect downstream water bodies. Operational impacts related to the violation of water quality standards and substantial degradation of water quality would be less than significant, and no mitigation is required.

Off-Site Impacts

Construction of the access road, utility lines and public facility improvements, including temporary trenching activities, would generate storm water pollutants, similar to those discussed above. These construction activities would have to be conducted in compliance with the Construction General Permit, including implementation of a SWPPP (RR HYD-1), which would include BMPs to reduce pollutants in storm water runoff during construction.

Once constructed, the access road, utility lines and facility upgrades would not, by themselves, generate pollutants that could enter the storm water and affect downstream water quality. Impacts related to the violation of water quality standards and substantial degradation of water quality would be less than significant and no mitigation is required.

Threshold 4.10b:

Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Short-Term On-Site and Off-Site Construction Impacts

The Project site is located just east of the California City Subbasin of the Fremont Valley Groundwater Basin, which serves as the main water source for the City (Stetson Engineers 2009).

The depth of groundwater beneath the site is not known but groundwater was found 454.5 feet below the surface at a well located 4.0 miles southeast of the site. Groundwater was estimated to be at least 200 feet below the ground surface (bgs) at the adjacent CCCC (Leighton 2017). Excavation and grading activities for the Project would not extend to 200 feet bgs. Similarly, construction of the proposed access road, utility lines, and public facility upgrades would not require excavation that would extend into underlying groundwater resources. Therefore, on-site and off-site excavation and grading would not directly affect underlying groundwater resources.

Construction pollutants at the Project site may be carried by storm water and may percolate into the ground. However, implementation of BMPs in the SWPPP for the Project (RR HYD-1) would include hazardous material management practices and other site-management BMPs that would reduce pollutants in the storm water and would reduce their potential to affect underlying groundwater resources. The use of water for construction activities (e.g., site watering for dust control, water for concrete/mortar mixes and cleaning) would be temporary in nature and would not result in a substantial demand for water that could lead to the depletion of groundwater resources, lowering of the groundwater table or impede sustainable groundwater management of the basin. Impacts to groundwater supplies or recharge during construction would be less than significant. No mitigation is required.

Long-Term On-Site and Off-Site Operational Impacts

Water service to the Project would be provided by the City, with water supplies coming from groundwater supplies and from imported sources of the State Water Project through the Antelope Valley – East Kern Water Agency (AVEK). No on-site wells would be installed or used for long-term operations at the Project site. The availability of water supplies to serve the Project from existing entitlements and resources is discussed in Section 4.18, Utilities and Service Systems but was determined to be less than significant.

The Project site does not serve as a groundwater recharge area although the site is largely undeveloped. While an increase in impervious surfaces at the site would occur due to the proposed buildings and pavements, the Project would include a series of retention basins that would collect and allow storm water to continue to percolate into the ground at the western section of the site. No change in ground percolation and no impact on groundwater recharge would occur with the Project. The proposed access road, utility lines and public facility upgrades would also not require water during long-term use. Thus, no impact to underlying groundwater resources in the California City Subbasin of the Fremont Valley Groundwater Basin would occur with the Project and no mitigation is required.

Threshold 4.10c:

Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site?

Short-Term On-Site Construction Impacts

The site is undeveloped and runoff flows southwesterly to off-site areas. During construction of the Project, exposed soils in areas where new structures are proposed may be subject to erosion during heavy rains or high winds. RR HYD-1 requires implementation of erosion-control BMPs to be outlined in the Project's SWPPP, which is required for coverage under the NPDES Construction General Permit. These BMPs would reduce wind and water erosion during short-term construction activities. Compliance with RR HYD-1 would prevent erosion and siltation from

short-term construction activities. Impacts related to the alteration of drainage patterns and potential for substantial erosion or siltation would be less than significant and no mitigation is required.

Long-Term On-Site Operational Impacts

Upon completion of construction activities, an increase in the amount of impervious surfaces would occur due to new structures and paved areas that would be built on the site. This would reduce the potential for wind and water erosion on-site. However, increases in impervious surfaces could result in increased storm water runoff and decreased infiltration.

However, as shown on Exhibit 3-2, Grading Plan, in Section 3.0, Project Description, on-site storm water runoff would be directed into a series of retention basins that would be constructed at the western section of the site (PDF HYD-1). These retention basins would collect stormwater and allow for continued ground percolation. In compliance with the Construction General Permit (RR HYD-1), these basins would also result in Project runoff matching the existing runoff volume and rate.

Grading of the site would create a more uniform and flatter area (with a 1.0 percent slope) on the site, which would be slightly lower in elevation than adjacent areas. Thus, minor slopes would be provided at the site perimeter, no steeper than 2:1 and with down drains and interceptor drains at various locations to prevent erosion and slope instability. Stormwater would then be directed around the proposed buildings toward the retention basins.

In the long-term, the Project would change the drainage patterns on the site. However, it would decrease on-site erosion and prevent the potential for off-site erosion and siltation since the runoff volume and rate would match existing conditions. Impacts related the increase of impervious surfaces, to the alteration of drainage patterns and potential for substantial erosion or siltation would be limited to the site and would be less than significant; no mitigation is required.

Off-Site Impacts

Changes in drainage patterns during construction of the utility line extensions and connections and the access road would be temporary and erosion-control and sediment-control BMPs implemented as part of the SWPPP (RR HYD-1) would reduce erosion impacts during construction. Upon completion, the access road would be at-grade and the utility line extensions and connections would be underground. Thus, they would not cause any substantial changes in drainage patterns or lead to substantial erosion or siltation. Improvements at the City's wastewater treatment facility (WWTF) and Phase 1 booster pumping station (BPS) could result changes to local drainage patterns, but increases in impervious surfaces and associated runoff are expected to be minor and would not cause downstream erosion or siltation. Impacts related to the alteration of drainage patterns and potential for substantial erosion or siltation from off-site improvements would be less than significant and no mitigation is required.

Threshold 4.10c:

Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Short-Term and Long-Term On-Site Impacts

As previously discussed, the Project site is undeveloped and the Project would introduce impervious surfaces in the form of the access road, drive aisles, parking areas, walkways, game courts, and buildings. The site would also be graded to create a more uniform and flatter area (with a 1.0 percent slope), which would be slightly lower in elevation than adjacent areas. Thus, changes in drainage patterns would occur on areas of the site where new structures and pavements are proposed and where ground elevations are altered.

The Project proposes an on-site storm drain system, which would include a series of retention basins that would collect stormwater from the site and the site perimeter (PDF HYD-1). The retention basins would remove pollutants from the storm water, as well as allow stormwater to percolate into the ground. Thus, no increase in the storm water runoff volume and rate would occur.

The Project would maintain or reduce the existing runoff volume and rate (as required under the Construction General Permit) and, thus, would prevent the creation of flooding on-site and off-site. The retention of storm water in the on-site basins would prevent additional sources of polluted runoff. Thus, the change in drainage patterns on the site would not lead to impacts related to flooding and polluted runoff. With implementation of PDF HYD-1, impacts would be less than significant and no mitigation is required.

Off-Site Impacts

Changes in drainage patterns during construction of the access road and utility line extensions and connections would be temporary and erosion-control and sediment-control BMPs implemented as part of the SWPPP (RR HYD-1) would reduce surface runoff impacts during construction. The proposed access road would be at-grade and the utility line extensions and connections would be placed underground. Also, they would not measurably increase impervious surfaces or runoff volumes or rates due to the limited areas of disturbance and paving. Improvements at the WWTF and Phase 1 BPS could result changes to local drainage patterns, but increases in impervious surfaces and associated runoff are expected to be minor and would not cause downstream flooding or additional sources of polluted runoff. No off-site flooding would occur and no new storm drain facilities would be needed by these off-site improvements. Impacts would be less than significant and no mitigation is required.

Threshold 4.10c:

Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(iv) impede or redirect flood flows?

Threshold 4.10d:

Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Short-Term and Long-term On-Site and Off-Site Impacts

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP), in accordance with the National Flood Insurance Act of 1968, as amended, and the Flood Disaster Protection Act. This program aims to reduce the impact of flooding by providing affordable insurance to property owners in flood hazard areas and encouraging communities to adopt floodplain management regulations. Flood hazard areas identified on FEMA's Flood Insurance Rate Maps (FIRM) include areas that will be inundated by a one-percent annual chance flood or 100-year flood and floodway areas and areas that will be inundated by a 0.2-percent-annual-chance flood or 500-year flood. The Project site is designated as Zone X—areas determined to be outside the 500-year floodplain (FEMA 2008). The site is also located outside the flood hazard areas identified in the City's General Plan (California City 2009).

Thus, the Project would not be exposed to flood hazards and would not place housing within flood hazard areas nor impede or redirect flood flows. The Project proposes a series of five retention basins on the western section for the infiltration and/or evaporation of surface water runoff collected from the rest of the site. The on-site basins would retain storm water runoff flow rates at pre-development conditions (PDF HYD-1). They would also prevent flooding on-site and off-site.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. In the event of an earthquake, a seiche can occur and potentially cause major flooding and water inundation damage. There are no large open water bodies in or near the Project site and areas where utility improvements are proposed and that may pose seiche hazards to the Project or that would subject the Project to inundation hazards from a seiche. No impacts would occur with the Project.

Tsunamis are tidal waves generated by fault displacement or major ground movement. Tsunami hazards are not present in the City or in Kern County due to distance from the Pacific Ocean. The site is located approximately 85 miles inland and is outside the tsunami inundation areas, as identified in the Tsunami Inundation Maps prepared by the California Emergency Management Agency (CDOC 2018a). The Project would not be exposed to tsunami hazards.

Construction of the proposed access road, off-site utility connections and improvements would largely involve the construction of at-grade or underground lines that would not result in flooding or be adversely affected by flooding. No impacts related to flooding or the redirection of flood flows would occur with off-site improvements. Also, the public facility upgrades at the WWTF and Phase 1 BPS would not create flooding or be adversely affected be floods.

The Project site and areas where the access road, utility lines, and public facility improvements are proposed are not located on or near a mountain or hill and the surrounding areas are relatively flat. Only minor slopes are proposed at the site perimeter and retention basins, with slopes no steeper than 2:1 and with down drains and interceptor drains at various locations to prevent erosion and slope instability. Therefore, mudslide hazards are not expected with the Project. The nearest hillside area is located at the Rand Mountains (7.7 miles to the north) and the Tehachapi Mountains (14 miles west of the site) (USGS 2020). Mudflows from these adjacent mountains would not affect the site due to distance. No impacts related to mudflows would occur and no mitigation is required.

No impacts related to flooding or the redirection of flood flows would occur with the Project and no mitigation is required.

Threshold 4.10e: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Short-Term and Long-Term On-Site and Off-Site Impacts

Excavation and grading activities for the Project would not extend to 200 feet bgs. Similarly, construction of the proposed access road, utility lines, and public facility upgrades would not require excavation that would extend into underlying groundwater resources.

As indicated above, the Project site is located just east of the California City Subbasin of the Fremont Valley Groundwater Basin. The Project site does not serve as a groundwater recharge area although the site is largely undeveloped. While an increase in impervious surfaces at the site would occur due to the proposed buildings and pavements, the Project would include a series of retention basins that would collect and allow storm water to continue to percolate into the ground at the western section of the site. No change in ground percolation and no impact on groundwater recharge would occur with the Project. The proposed access road, utility lines and public facility upgrades would also not require water during long-term use. Thus, no impact to underlying groundwater resources in the California City Subbasin of the Fremont Valley Groundwater Basin would occur with the Project and there would be no conflict with the groundwater management plan. No impacts would occur and no mitigation is required.

4.10.7 CUMULATIVE IMPACTS

Cumulative hydrology and water quality impacts are considered within the Koehn Lake watershed, where the Project site is located.

Water Quality

Future growth and development in California City and in the Koehn Lake watershed (which includes most of the developed portions of the City and the Project site) would generate new sources of urban pollutants that could degrade water quality in surface water bodies and in the groundwater. However, construction activities on sites of one acre or more are required to implement BMPs listed in individual SWPPPs, which are required under the NPDES Construction General Permit (RR HYD-1). The CalGreen Code (which has been adopted by the City) also requires SWPPPs for projects on sites less than one acre. Compliance with these regulations would prevent short-term construction activities from the Project and future growth and development in the area from resulting in significant cumulative water quality impacts in the same watershed.

The Lahontan RWQCB issues WDRs that impose regulations for storm water discharges from individual developments that may lead to pollutant discharges into the storm drain system or surface water bodies. These regulations implement the Basin Plan for the Lahontan region and help meet the established water quality objectives for both groundwater and surface water bodies. Compliance with the WDRs would prevent violation of water quality standards. The Project includes the construction of on-site retention basins to prevent stormwater pollutants from entering off-site drainage channels or water bodies. With the implementation of treatment-control and source-control BMPs by the Project, and with compliance by the other development projects with applicable Lahontan RWQCB's WDRs for storm water discharges, future growth and development within the Koehn Lake watershed would not increase pollutant loads in storm water runoff such that a violation of water quality standards would occur. Cumulative adverse impacts related to water quality would be less than significant. No mitigation is required.

Groundwater

As the Project does not propose the direct use of groundwater supplies for its long-term operations, it would not contribute to the use or depletion of local groundwater supplies. No cumulative impact on groundwater resources would occur with the Project.

Increases in the resident population and intensity of development in the Koehn Lake watershed would translate to a greater demand for water, with groundwater resources providing 75 percent of the water supply to the City. The increase in groundwater pumping could lead to adverse impacts on the groundwater. However, the City is implementing water conservation programs, a no waste ordinance, and a water shortage contingency plan to reduce the demand for water in the City. The City's Urban Water Management Plan identifies measures that would allow the City to continue to have adequate water supplies to meet demand during a normal, single-year drought and multiple-year drought conditions. Cumulative impacts would be less than significant and no mitigation is required.

Hydrology and Storm Drainage

Future growth and development in the Koehn Lake watershed would increase impermeable surfaces and decrease water percolation areas. Increase in impervious surfaces could increase storm water volumes and flow rates in local and regional drainage channels. However, compliance with the Construction General Permit that requires projects to match pre-project runoff volume through the use of non-structural or structural measures and for projects on sites larger than two acres to maintain the site's pre-project runoff rate would prevent changes in drainage patterns that could result in flooding or the need for upgraded storm drainage facilities. Therefore, no cumulative adverse impacts related to flood hazards or inadequate storm drainage would occur with compliance with existing regulations. No mitigation is required.

Dam and Reservoir Facilities

Dams in the Project area are limited to those located near the U.S. Borax open pit mine in Boron, California, approximately 10 miles to the southeast. These dams are associated with the mining and refining process at the U.S. Borax plant. The potential for property damage and personal injury is decreased by the construction of dams in accordance with federal and State dam safety regulations and the preparation of the required emergency action plans for individual dams, since these emergency action plans establish warning, evacuation, and post-disaster actions. The Project would not be exposed to dam inundation hazards nor would it contribute to the creation of dam inundation hazards. No cumulative impact would occur.

Future development in the City and Kern County would not be exposed to tsunami hazards due to its inland location. The site is not located near a large open body of water and seiche hazards would only affect local areas adjacent to an open water body or reservoir and, thus, the Project would not create cumulative impacts. Future development on steep hillside areas may be exposed to potential mudflow hazards. However, the site and surrounding area is relatively flat and no cumulative impacts related to mudflow would occur. Therefore, cumulative adverse impacts related to dam inundation, tsunami, seiches, and mudflows would not occur with the Project.

4.10.8 MITIGATION MEASURES

With implementation of PDF HYD-1 and compliance with existing regulations (RR HYD-1), no significant adverse impacts related to hydrology and water quality would occur. Therefore, no mitigation measures are required.

4.10.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Direct, indirect, and cumulative impacts related to hydrology and water quality would be less than significant with compliance with existing regulations.

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4.11 LAND USE AND PLANNING

This section describes the current and planned land uses in and near the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) and addresses potential land use impacts that could result from implementation of the Project. Information presented in this section is based on field reconnaissance, review of aerial photographs, and review of relevant planning documents as identified herein. The Project's consistency with applicable land use designations, zoning, and policies is assessed through review of the land use goals and policies contained in the California City General Plan and other related planning programs, including the regional plans of the Kern Council of Governments (Kern COG).

The Project site is located in the City of California City (City), on property owned by CoreCivic. Thus, the Project is subject to California City's land use regulations. This section evaluates the Project's consistency with California City's land use plans and policies.

4.11.1 RELEVANT PROGRAMS AND REGULATIONS

State

Senate Bill SB 375

Senate Bill (SB) 375, signed on September 30, 2008, provides a planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet greenhouse gas (GHG) reduction goals established in Assembly Bill (AB) 32 (discussed in detail in Section 4.8, Greenhouse Gas Emissions). SB 375 requires regional transportation plans, developed by Metropolitan Planning Organizations (MPOs) like Kern COG, to incorporate a "sustainable communities strategy" (SCS) in its Regional Transportation Plan (RTP). The SCS is intended to demonstrate how the coordination of land use and transportation planning efforts may achieve GHG emissions reduction targets set by AB 32. If an SCS cannot achieve the GHG emissions target, the MPO is required to adopt an "alternative planning scenario" (APS) that will demonstrate what would need to be done to achieve the GHG emissions reduction target and to define the barriers to accomplishing the reduction.

Regional

Kern COG is the federally-designated MPO for the County of Kern (County) and the 11 incorporated cities in Kern County. Kern COG also serves as the State-designated Regional Transportation Planning Agency and the Congestion Management Agency for Kern County. It has developed a number of plans to achieve regional objectives, and applicable plans are discussed below.

Regional Blueprint

The Regional Blueprints were developed to serve as regional visions for future growth and quality of life in the San Joaquin Valley regions, which include the counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare. The blueprints provide a regional vision that integrates transportation, housing, land use, economic development, and environmental protection (i.e., water availability, air quality, open space preservation) issues. However, they are advisory in nature and were provided to local jurisdictions for voluntary use in their General Plans.

The Smart Growth Principles that have been adopted into the Regional Blueprints include:

- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Encourage community and stakeholder collaboration
- Foster distinctive, attractive communities with a strong sense of place
- Make development decisions predictable, fair, and cost-effective
- Mix land uses
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Provide a variety of transportation choices
- Strengthen and direct development towards existing communities
- Take advantage of compact building design
- Enhance the economic vitality of the region
- Support actions that encourage environmental resource management

The shared vision for the San Joaquin Valley region is defined by compact growth forms that emphasize safe, walkable, bikeable communities; the availability of significant transit opportunities; and the protection of open space. New urban growth would be encouraged within existing spheres of influence or specifically selected planning areas, with the average density of new residential development at 10 dwelling units per gross acre (du/ac).

The Kern COG Blueprint envisions the maintenance of unique, livable communities; protection of the environment; building of the economy; expansion of mobility; preparation of youth for the future; preservation of health and safety; enhancement of parks and recreation; and expansion and coordination of planning efforts. The guiding principles for this vision include the conservation of energy and natural resources; provision of adequate and equitable services; enhancement of economic vitality; provision of housing choices; use and improvement of existing community assets and infrastructure; encouragement of compact mixed-use development; provision of transportation options; conservation of land; and increased civic engagement. Kern COG assumes the future development of residential and employment centers that include metropolitan, community, town, and village centers with its own population, commercial, residential, and employment bases. In addition, each center would feature appropriately-scaled mixed-use buildings; walkable design; improved public transit; and tourism.

The Kern COG Blueprint is reflected in the growth projections and future development assumptions that are used in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Regional Housing Needs Assessment Plan (RHNA Plan) for Kern County.

Regional Transportation Plan/Sustainable Communities Strategy

The Kern County RTP serves as the master plan of capital transportation projects for the Kern region for the next 20 years. The SCS is part of the RTP and integrates land use and transportation strategies to achieve California Air Resources Board (CARB) emissions reduction targets pursuant to SB 375. The 2018 RTP/SCS was adopted on August 16, 2018 and is currently in effect.

An extensive public participation program was conducted as part of the development of the current RTP/SCS. This led to a combined vision: Maintain, fix and finish what we have. In line with this vision, the 2018 RTP/SCS continues the region's transportation goals, policies, and actions for the development of the multi-modal transportation system in the County. It combines the goal for increased mobility, accessibility, reliability and efficiency of the transportation system with the need for livability, sustainability and equity for the creation of a stronger economy, healthier environment, and safer quality of life.

Challenges and issues that are addressed in the RTP/SCS include the high unemployment in the County, air quality, available funding, projected growth and development, and traffic patterns. Specifically, the size and diverse environment and industries in Kern County provide residents with a wide variety of choices on where to live, work, and play, and move around. The County experiences a reverse commute pattern where residents in urban centers commute to outlying areas for employment. Significant growth has occurred and is projected to continue to occur in the County. Air quality in the region has been improving since the 1990s but future increases in population and travel could lead to air quality violations.

The strategic investments in the RTP/SCS consider existing and new funding sources and call for fully funding alternative transportation modes, while emphasizing transportation demand and transportation system management approaches (by improving transit services, the bikeway network, opportunities for walking, and housing options). It includes transportation system improvements to transit facilities, highways, non-motorized transportation (i.e., bikeways and Green Streets), freight rail, aviation, major highways, and local streets and roads. These transportation projects are anticipated to increase the County's economic base and allow for reinvestment in a more efficient and cleaner transportation system.

Transportation projects under the unconstrained scenario in the 2018 RTP/SCS include the widening of California City Boulevard, Twenty Mule Team Parkway, and North Gate Road to four lanes.

Regional Housing Needs Assessment Plan

Kern COG's Regional Housing Needs Assessment Plan (RHNA Plan) provides an allocation of each city and the County's fair share of the region's projected housing needs by income group. This avoids the over-concentration of lower income households in any one community and allows local governments to plan where and how the allocated housing units will be developed within their communities.

The 2013-2023 RHNA Plan shows that the City has a future housing need of 1,268 new dwelling units, with 254 units for very low income households, 131 units for low income households, 155 units for moderate income households, and 728 units for above moderate income households. The City's allocation of 1,268 units is 1.9 percent of the total housing need in Kern County (Kern COG 2014).

The 2014 RHNA Plan is part of the 2018 RTP/SCS and was used for land use planning; developing local housing programs; prioritizing local resource allocation; addressing identified existing housing deficiencies; and accommodating future housing needs resulting from population, employment, and household growth in the Housing Element of each city and the County.

City

California City General Plan

The City of California City's General Plan regulates land use and development in the City through six Elements. The Land Use Element addresses existing and future land use and development in the City and serves as a guide for managing the growth of residential, commercial, recreational, industrial, and institutional land uses and the preservation of open space and natural resources. The Circulation Element discusses the existing and proposed transportation and circulation system to serve the needs of existing and future development. The Housing Element identifies the City's existing and future housing needs and sets goals, objectives, and programs to serve

these needs. The Open Space and Conservation Element calls for the preservation, use and enhancement of open space and natural resources in the City, as well as the provision of parks. The Safety Element identifies natural and other hazards in the City and plans for the provision of adequate public safety services to reduce these hazards. The Noise Element addresses the control of major noise sources to reduce the noise exposure of sensitive land uses. Each Element includes the City's goals, policies, and implementation measures to achieve an overall goal.

On the California City General Plan Designation Map, the site is designated as Controlled Development, Public Parks and Recreation and Public Schools, with a small sliver at the northern edge designated as Conservation Land (California City 2016). The Controlled Development, Public Parks and Recreation and Public Schools designation allows a variety of land uses that are consistent with the goals, objectives, and policies of the City's General Plan and subject to approval of detailed plans that serve to address the social, environmental and economic concerns of the community. This designation is conditionally compatible with industrial uses, commercial uses, recreational uses, large lot subdivisions, open space uses, agricultural and horticultural uses. Conservation Land includes land designated for the protection, preservation and conservation of unique areas (California City 2009). The area designated as Conservation Land on the Project site is part of a larger irregular shaped Conservation Land area located on Bureau of Land Management (BLM) property immediately adjacent to the north (refer to Exhibit 4.11-1, California City General Plan Land Use Map. It should be noted that a similar irregular shaped BLM area designated as Conservation Land underlies a small segment of the northern part of the existing CCCC. Compared to the other Conservation Land areas designated in the City which follow clear parcel boundaries, the irregular shaped areas that underlie small portions of Project site and adjacent CCCC appear to be a mapping error. The sliver of land area with the Conservation designation does not contain any unique physical, biological or cultural resource characteristics that would warrant a Conservation designation. In addition, as noted below, the entire Project site, BLM area, and surrounding areas are zoned Residential Agricultural (RA) and Open Space (O).

California City Zoning Regulations

The California City Zoning Regulations are contained in Title 9, Chapter 2 of the City's Municipal Code. The Project site is zoned Residential Agricultural (RA) and Open Space (O). The RA district includes areas that combine the advantages of urban and rural location by limiting developments to very low density single-family residential uses and allowing the keeping of animals. Permitted uses include single-family homes, mobilehomes, riding stables, agricultural uses, nurseries, greenhouses, open space and conservation lands. Governmental or quasi-governmental correctional, probation, or prison facilities and services are conditionally allowed in the RA district. The O district includes areas for the preservation and conservation of natural resource lands. It allows agricultural uses, flood channel, land and wildlife preserves, and ponds and basins (Municode 2017).

4.11.2 EXISTING CONDITIONS

The 216.5-acre Project site is located on a 321.5-acre parcel that is owned by CoreCivic. The northwestern portion of this parcel is developed with the California City Correctional Center (CCCC), which is currently operated under the jurisdiction of the California Department of Corrections and Rehabilitation (CDCR) (CDCR 2016a). The Project site for the CFCC is located immediately east of the CCCC and is surrounded by undeveloped land on all other sides.

On-Site Land Uses

The Project site is undeveloped. Section 2.0 of this Environmental Impact Report (EIR) discusses the existing environmental setting, with more detailed information for various environmental issues provided in each subsection in Section 4.0 of this EIR. Exhibit 2-3, Aerial Photograph, provides an aerial view of the Project site and surrounding areas. This exhibit shows the existing structures on the CCCC, which includes nine buildings with a total floor area of 510,980 square feet (Kern County Assessor-Recorder 2018), and surface parking lots and outdoor storage areas to the south.

The Project would be required to comply with the applicable land use regulations of California City. As shown on Exhibit 4.11-1, California City General Plan Land Use Map, the City designates the site as Controlled Development; Public Parks and Recreation; and Public Schools, with a sliver at the northern edge designated as Conservation Land (California City 2016).

Surrounding Off-Site Land Uses

Areas west of the site include the CCCC and undeveloped land, within the same parcel as the Project site, that is designated mostly as Controlled Development, Public Parks and Recreation and Public Schools and a sliver on the northern end of the parcel as Conservation Land. Farther west is also undeveloped land designated as Controlled Development, Public Parks and Recreation and Public Schools.

The 39.6 acres of undeveloped land to the west and southwest of the site was approved in 2009 for a 2,200-bed correctional center. However, there is no set time frame for construction of this facility.

South of the site is undeveloped land consisting of 10- to 40-acre parcels that are designated as Estate Density Residential (1 du/2 acres). A small hill is southwest of the site, south of Lindberg Boulevard, east of 145th Street and north of George Boulevard. Approximately 0.5 mile to the south of the site is the City limits, which follows the alignment of George Boulevard. Land farther south is public land owned by the Bureau of Land Management (BLM) within the unincorporated area of Kern County.

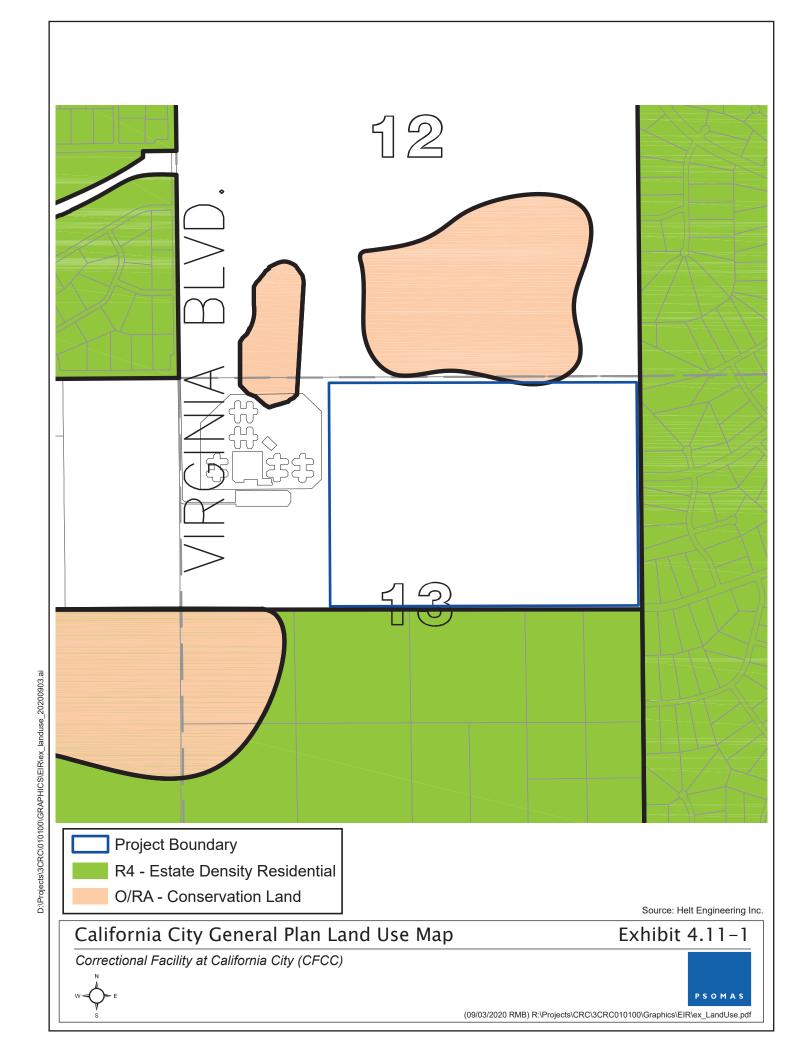
East of the site is undeveloped land that was subdivided more than 50 years ago into residential lots that are two acres or more in size and designated as Estate Density Residential (1 du/2 acres). Roads have been rough-graded in this area but no utilities have been installed and no residences have been built.

North of the site is an approximately 640-acre undeveloped parcel that is owned by BLM and bisected by Twenty Mule Team Parkway. It includes a City-owned water tank site, north of Twenty Mule Team Parkway. Two areas at the southern section of this BLM parcel are designated as Conservation Land (immediately north of the site and the CCCC), with the rest of the parcel designated as Controlled Development, Public Parks and Recreation, and Public Schools.

4.11.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Land Use and Planning if it would:

Threshold 4.11a: Physically divide an established community.



Threshold 4.11b: Cause a significant environmental impact due to a conflict with any land use

plan, policy, or regulation adopted for the purpose of avoiding or mitigating

and environmental effect.

4.11.4 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.11a Would the project physically divide an established community?

Short-Term and Long-Term On-Site Impacts

There are no residential uses on the Project site, and no established communities exist near the site that would be divided by the Project. As shown in the aerial photograph provided in Exhibit 2-3 and described in Section 2.2, Project Site Characteristics, the Project would be developed on vacant land located immediately east of the existing CCCC. The nearest residential uses are mobile homes/large recreational vehicle trailers parked on unimproved desert land located approximately 0.55 mile to the northwest. However, these mobile homes may only be temporarily parked in the area. Also, the Project would not displace or affect these mobile homes.

The CCCC was constructed in 1999, and the rest of the parcel has remained undeveloped. A 2,200-bed correctional center was approved by the City for the 39.6-acre area south of the CCCC but this facility is not planned for immediate construction. Thus, when considered in the context of the existing and approved land uses near the Project site, the proposed Project would not be an introduction of a new land use into the area but an expansion of similar land use and development within an adjacent parcel. Future inmates of the Project would be confined to the Project site and employees of the CFCC would be travelling to and from the Project, with most activities on the Project site. Activities would be similar to those at the adjacent CCCC and future correctional center. The Project includes 55-foot setback areas along the northern, eastern, and southern site boundaries for the future right-of-way of local streets if needed, slopes retention basins, and perimeter fences and roads would also surround the Project site. Thus, the Project would not create a land use conflict with the surrounding correctional uses and undeveloped land.

Therefore, the long-term operation of the Project is not anticipated to affect residential uses in the City and would not disrupt the physical arrangement of an established community. No impact would occur and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

The Project would not alter residences along roads where utility lines and infrastructure improvements are proposed within public rights-of-way nor would these off-site improvements create physical obstructions or barriers to the community. Construction of the proposed off-site, access road, infrastructure improvements and public facility upgrades would be located on CoreCivic-owned land, public rights-of-way or publicly owned facilities; would be at-grade or underground or at existing public facility sites; and would not disrupt the physical arrangement of any established communities. Upon completion, use and operation of these utility lines and facilities would also not affect existing communities in the City. No impact would occur and no mitigation is required.

Threshold 4.11b:

Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating and environmental effect?

Short-Term and Long-Term On-Site Impacts

The Project site is located in the City and, thus, is subject to the City's land use regulations. Project consistency with the City's land use plans and policies is discussed below.

California City General Plan

The California City General Plan sets land use policies for all land in the City. The General Plan consists of six Elements that contain the City's goals, policies and implementation measures for achieving its vision or overall goal.

Project consistency with relevant goals and policies in the General Plan is provided in Table 4.11-1. While there are specific implementation measures listed under the goals and supporting policies, these measures would generally be implemented by the City and CoreCivic would have no responsibility, authority or control over these measures. Thus, no consistency analysis is provided for most of the implementation measures listed in the various Elements of the California City General Plan.

TABLE 4.11-1
CALIFORNIA CITY GENERAL PLAN CONSISTENCY

Goal, Policy, or Implementation Measure	Project Consistency	
Land Use Element		
Overall Goal: Promote land use distribution which provides for safe residential neighborhoods, bolsters' economic prosperity, protects property value, preserves open space and natural resources, allows for recreational opportunities, and enhances the overall quality of life in California City.	Consistent: The Project is consistent with planned land uses for the site and would create employment opportunities that would bolster the local economy.	
Goals		
To facilitate and implement growth and development coordinated with the provision of infrastructure, public facilities, and public services.	Consistent: The Project would facilitate growth on the site and would provide the necessary infrastructure improvements. Impacts on public services would be less than significant, as discussed in Section 4.15, Public Services and Recreation and impacts on utilities would also be less than significant after mitigation, as discussed in Section 4.18, Utilities and Service Systems.	
Encourage commercial, industrial, and Government (public facilities) entities that will create sustainable employment in jobs paying higher wages in compliance with the environmental standards for the City and the region.	Consistent: The Project would lead to the development of a correctional facility that would create jobs paying market-rate wages and would comply with the City's environmental standards.	
Accommodate new development which is compatible with and complements existing land uses within the General Plan planning area.	Consistent: The Project would be compatible with the existing prison facility to the west of the site and the surrounding undeveloped lands.	
Accommodate new development which is sensitive to and capitalizes on the General Plan planning area's natural environmental setting.	Consistent: The Project has been designed to limit impacts on the surrounding lands and the natural environmental setting through setback areas, low profile buildings with light earth tone coatings, and other project features and mitigation measures discussed in other sections of this EIR.	

Goal, Policy, or Implementation Measure	Project Consistency
Accommodate new development that is compatible with natural and manmade hazards that affect the General Plan planning area.	Consistent: The Project's impacts related to hazards is discussed in Section 4.7, Geology and Soils and Section 4.9, Hazards and Hazardous Materials. Impacts would be less than significant with compliance with existing regulations and implementation of mitigation measures.
Policies	
Coordinate with the appropriate agencies and proponents of any phased large-scale development so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational facilities, and other service uses required to serve the community.	Consistent: The Project's impacts on public services have been analyzed in Section 4.15, Public Services and Recreation. The analysis includes coordination with public service agencies and impacts would be less than significant.
Locate new institutional development where infrastructure is available or can be logically expanded to serve a new facility.	Consistent: The Project would be served by utility infrastructure that is present near the site and includes the extension of other utility infrastructure systems to provide adequate services to the Project.
Coordinate a consistent design vocabulary for all signage, including fixture type, lettering, colors, symbols, and logos.	Consistent: The Project would be subject to design and site plan review for consistency with the City's sign regulations.
Provide signage which is adequately spaced and clearly visible during the day and night to control vehicular traffic, bicycles, and pedestrians and provide for emergency access.	
Ensure that light and glare from discretionary new development projects and minimized.	Consistent: The Project has been designed to provide the necessary levels of security lighting, with light fixtures shielded, directed downward and into the Project site to minimize light spillover and glare.
The developer shall be responsible for all on-site costs incurred as a result of a proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity.	Consistent: The Project includes on-site improvements and off-site utility improvements (on a proportional basis) needed to serve the Project.
Provide for a mix of land uses which meets the diverse needs of residents; offers a variety of employment opportunities; capitalizes, enhances, and expands upon existing physical and economic assets; and allows for the capture of regional growth.	Consistent: The Project would provide a facility that would create jobs in the City and accommodate future correctional facility populations.
In the areas of the City outside the central core, all developments must provide complete public infrastructure improvements including community water distribution and sewage collection and treatment systems. These developments may be permitted a density increase up to 20 percent if the developments include an affordable homes component. All land division activities shall be consistent with the provision.	Consistent: The Project includes off-site water and sewer line and facility improvements needed to serve the Project.
To encourage quality design of land use developments in both public and private facilities.	Consistent: The Project would be subject to design and site plan review by City staff to promote quality design.

Goal, Policy, or Implementation Measure	Project Consistency
To promote and facilitate economic growth and diversification. To encourage the development of land uses which will	Consistent: The Project would create jobs for local residents and other individuals in the surrounding area and the region.
improve the availability of local residents to work, shop and obtain services in California City.	
To ensure that the City's environmental setting, including clean air, open character, lack of traffic congestion, and comparatively low intensity of land uses, is preserved as development of the community progresses.	Consistent: The Project would maintain the open character and low intensity development of the area through the provision of wide setback areas and low-profile buildings, as discussed in Section 4.1, Aesthetics. The Project's impacts on air quality would be mitigated to less than significant levels, as discussed in Section 4.3, Air Quality. The Project's impacts on traffic would be less than significant, as discussed in Section 4.16, Transportation.
Ensure energy efficiency and low maintenance needs through the land use planning, building design, and landscape design of future development in the City.	Consistent: The Project would incorporate water and energy conservation measures, as discussed in Section 4.8, Greenhouse Gas Emissions, and Section 4.18 Utilities and Service Systems.
Circulation Element	
Overall Goal: Provide a balanced circulation system to meet the needs of the residents, businesses, and visitors to California City.	Consistent: The Project would be served by an adequate circulation system and impacts on traffic would be less than significant, as discussed in Section 4.16, Transportation.
Policies	
Encourage comprehensive parking designs that discourages private vehicle use and encourages the use of alternative transportation. For example, reduce parking for private vehicles while increasing options for alternative transportation; review minimum parking requirements for new buildings.	Consistent: The Project would be staffed by shift, which would promote ridesharing (e.g., carpools and vanpools) to local communities and residential areas.
Provide an arterial system that serves the major centers of activity within the urbanized areas and provides capacity for the highest traffic volumes and longest trip lengths. To the extent feasible, direct access onto arterials from individual parcels should be restricted.	Consistent: The Project would be served by an adequate circulation system and impacts on traffic would be less than significant, as discussed in Section 4.16, Transportation. Also, the Project does not propose direct access to an arterial (i.e., Twenty Mule Team Parkway) but would have direct access to a collector (Virginia Boulevard).
Require that new development of major traffic generating projects restrict direct access onto arterials or collectors through the project design, which may include any combination of the following measures deemed acceptable by the City:	
 Access to other surrounding streets; 	
 The limitation on the number and location of direct access point; and/or 	
 The use of reciprocal access easements with other adjoining properties. 	
Provide collectors for internal traffic, movement within an area and connect local roads to the arterial system. Access to abutting property is generally permitted.	

Goal, Policy, or Implementation Measure	Project Consistency
The City shall require the completion of planned arterial and collector streets as they become necessary to serve new development or to meet cumulative traffic demands in the City. This shall be accomplished by the following: • Adopt a street improvement program based on a current surface maintainability and traffic impact priority system; • Coordinate the street improvement of	Consistent: The Project would include construction of a site access road connecting to Virginia Boulevard. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets.
necessary street facilities as a condition of land development. Utilize available State and Federal funds for	
street and highway development; and/or	
 At such time as the LOS standard set forth in the Circulation Element of the General Plan is exceeded, the City shall review and adopt any and all legally available funding mechanisms, which will allow the City to achieve compliance with the standards. 	
Require the installation of signals, signs, lighting, and other traffic improvements necessary for the safe and efficient movement of vehicular traffic and pedestrians within the City. This shall be accomplished by the following: • Require the installation of necessary street improvements as a condition of land development.	Consistent: The Project would include the construction of necessary roadway improvements to serve the Project.
Development of roads within the City shall be in accordance with the Circulation Plan. The depicted roads are usually on section and mid-section lines.	Consistent: The Project would include construction of a site access road connecting to Virginia Boulevard. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets.
The timing and scope of required facilities should be set up and implemented through the City's Land Division Code. However, the City will routinely protect all surveyed section lines in the City for arterial right-of-way. The City will routinely protect all mid-section lines for collector highways in the City. In the portions of the City where terrain does not allow construction on surveyed section and mid-section lines, right-of-way width will be the size shown on the Circulation Plan. No surveyed section and mid-section "grid" will comprehensively apply to the City. At the City's discretion, a road constructed by a	Consistent: The Project would include construction of a site access road connecting to Virginia Boulevard. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets.
developer and/or land owner may be accepted into the City's maintained road system. Roads will be included in the City road maintenance system through approval by the City Council.	

Goal, Policy, or Implementation Measure	Project Consistency	
Implementation Measure		
T-3. With the exception of state highways, all roads and rights-of-way shall be constructed in accordance with the City's Municipal Code, Chapter 2. Traffic.	Consistent: The Project would include construction of a site access road connecting to Virginia Boulevard. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets.	
T-7. The City shall require the preparation of a Traffic Impact Analysis (TIA) for proposed private development projects consistent with the City's Municipal Code, Chapter 2. Traffic. The TIA will, at a minimum be required to address off-site traffic circulation, on-site traffic circulation, and alternative transportation including transit and bicycles. The TIA shall identify the impacts of the proposed development project and define mitigation measures to address effects determined to be significant. The TIA shall be used in the preparation of the appropriate environmental documentation consistent with the requirements of the California Environmental Quality Act (CEQA).	Consistent: A TIA has been prepared for the Project and is summarized in Section 4.16, Transportation. As discussed, Project impacts on traffic and transportation would be less than significant.	
T-9. As a condition of proposed private development project approval, the City shall require that the project applicant/developer to build roads needed to access the existing highway and street system as defined in the Circulation Plan. Developers shall build these roads in accordance with the City's Municipal Code, Chapter 2. Traffic. Developers shall locate these roads along center lines shown on the Circulation Plan unless otherwise authorized by an approved Specific Plan Line.	Consistent: The Project would include construction of a site access road connecting to Virginia Boulevard. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets.	
T-21. All discretionary development proposals shall be reviewed for compatibility with the adopted Airport Land Use Compatibility Study. Appropriate limitations and conditions shall be incorporated to address compatibility with the California City Municipal Airport and encroachment issues related to Edwards Air Force Base, Naval Weapons Station China Lake, and the military complex airspace. Incompatible uses shall not be permitted unless appropriate findings regarding public health, safety, and military readiness can be made.	Consistent: The Project site is located approximately 8.6 miles east of the California City Airport and would not affect operations at this airport. The Project would not conflict with the encroachment zones for Edwards Air Force Base, Naval Weapons Station China Lake, and the military complex airspace, with the implementation of mitigation measures, as discussed in Section 4.9, Hazards and Hazardous Materials.	
Housing Element		
To provide an adequate supply of sound, affordable housing in a safe and satisfying environment for residents and others who wish to live in California City.	Consistent: The Project's inmate population would increase the City's resident population. However, these inmates would be confined at the Project site and would not require traditional housing units.	
Open Space and Conservation Element		
To preserve and protect open space resources which contribute to the well-being of California City residents. To preserve and protect conservation resources that are unique to California City environs.	Consistent: As previously indicated the sliver of land along the northern edge of the Project site that is designated as Conservation Land appears to be a General Plan mapping error. The sliver of land would be utilized as dedicated right-of-way for the potential future extension of Gordon Boulevard. This sliver contains no unique features or resources that differ	

Goal, Policy, or Implementation Measure	Project Consistency
	from the surrounding lands and the RA and O zoning is consistent throughout the Project site and surrounding areas Mitigation for impacts related to the reduction of habitats for sensitive species is addressed in Section 4.4, Biological Resources. Mitigation for impacts to cultural resources is addressed in Section 4.5, Cultural Resources. Impacts to groundwater resources is addressed in Section 4.10, Hydrology and Water Quality. Impacts on air quality is addressed in Section 4.3, Air Quality.
Goals	
Ensure an adequate water supply for existing residents and businesses and planned growth and development.	Consistent: Adequate water supply would be available to the Project, as evaluated in the Water Supply Assessment (WSA) for the Project and summarized in Section 4.18, Utilities and Service Systems.
Promote the improvement of air quality and the maintenance of State and federal air quality standards.	Consistent: The Project would not lead to the violation of air quality standards, as discussed in Section 4.3, Air Quality.
Encourage conservation of energy resources.	Consistent: The Project would implement energy conservation measures, as discussed in Section 4.8, Greenhouse Gas Emissions.
Promote conservation of sensitive vegetation and wildlife.	Consistent: Mitigation for impacts related to the reduction of habitats for sensitive species is addressed in Section 4.4, Biological Resources.
Promote conservation of historical and cultural resources.	Consistent: Mitigation for impacts to cultural resources is addressed in Section 4.5, Cultural Resources.
Policies	
To conserve open space, the Controlled Development land use designation as indicated on the General Plan Land Use Plan will continue to apply to outlying areas where infrastructure and public services are not provided or where there are significant biological resources, drainage areas, or mineral resources.	Consistent: The Project is consistent with the Controlled Development, Public Parks and Recreation, and Public Schools designation. The Project would also include the construction of needed on-site and off-site infrastructure improvements to serve the Project. Mitigation for impacts related to the reduction of habitats for sensitive species is addressed in Section 4.4, Biological Resources. Changes in drainage patterns are addressed in Section 4.10, Hydrology and Water Quality. There are no mineral resources on or near the site, as discussed in Section 4.12, Mineral Resources.
Provide sufficient water to meet the existing and projected needs of the community, while emphasizing conservation goals.	Consistent: The Project would implement water conservation measures, as required by the City and the CalGreen Code. Adequate water supply would be available to the Project, as evaluated in the WSA for the Project and summarized in Section 4.18, Utilities and Service Systems.
Continue to promote and encourage water conservation to residents and businesses in the community.	
Coordinate with AVEK and the City Public Works Department to implement the water master plan that addresses new infrastructure, as well as improvements and upgrades to the existing water systems in the General Plan Planning Area.	Consistent: The Project would connect to the existing water line in Virginia Boulevard and would provide an additional pump at the Phase 1 BPS to adequately serve the Project, as required by the City and in accordance with City standards. The preparation of the WSA included consultation with AVEK.

Goal, Policy, or Implementation Measure	Project Consistency
Require compliance for development projects with the requirements of the California Water Code Section 10910 regarding water supply.	Consistent: A WSA has been prepared for the Project and is summarized in Section 4.18, Utilities and Service Systems.
Require urban development that implements the General Plan Land Use Plan to be served by AVEK, the City, or other community or public water system.	Consistent: The Project would be served by the City's water system and includes the construction of a connection to the existing water line in Virginia Boulevard and an additional pump at the Phase 1 BPS to adequately serve the Project.
New development proposals shall implement Best Management Practices (BMPs) under the National Pollution Discharge Elimination System (NPDES) permit. These practices are designed to reduce pollution runoff during construction of new projects and rehabilitation projects.	Consistent: The Project would implement construction BMPs identified in the Stormwater Pollution Prevention Plan for the Project, as required under the NPDES Construction General Permit. The Project also includes on-site retention basins to remove pollutants in the storm water runoff. This is discussed in Section 4.10, Hydrology and Water Quality.
Urban development shall be served by a public sewage system or a private centralized sewage system, unless waived by the City or the Kern County Environmental Health Services Department. Urban development is defined as residential lots less than one-half (½) acre, and industrial and commercial uses regardless of size.	Consistent: The Project would be served by the City's sewer system and includes the construction of on-site and off-site sewer lines and the necessary sewer system improvements at the WWTP (on a proportional basis) to serve the Project.
Utilize the policies defined in the General Plan Safety Element for the proper management of lands where soil or geologic conditions pose risks to development.	Consistent: Project consistency with the policies in the Safety Element is provided below. Geologic issues are addressed in Section 4.7, Geology and Soils.
Cooperate with the Kern County Air Pollution Control District (APCD) to implement the APCD's Air Quality Attainment Plan.	Consistent: The Project would not conflict with the Air Quality Attainment Plan, as discussed in Section 4.3, Air Quality.
Continue to enforce the City's Grading Code, along with dust control and other rules and measures through the Air Pollution Control District to mitigate air quality effects during the construction of new development.	Consistent: The Project would implement dust control measures in accordance with City and Eastern Kern Air Pollution Control District (EKAPCD) regulations, as discussed in Section 4.3, Air Quality.
Encourage development designs that promote energy conservation and that minimize the direct and indirect emissions of air contaminants.	Consistent: The Project would implement energy conservation measures in compliance with the CalGreen Code that would indirectly reduce air pollution, as discussed in Section 4.3, Air Quality, Section 4.8, Greenhouse Gas Emissions, and Section 4.6, Energy.
Promote energy conservation measures contained in Title 24 of the California Code of Regulations.	Consistent: The Project would implement energy conservation measures under Title 24 and the CalGreen Code, as discussed in Section 4.8, Greenhouse Gas Emissions and Section 4.6, Energy.
Promote a logical extension of development to utilize existing infrastructure and conserve resources.	Consistent: The Project would utilize existing utility lines serving the adjacent CCCC, as well as construct the necessary utility infrastructure improvements to serve the Project.
Encourage energy conservation in both the private and public sectors by promoting utility company incentive programs for both new development and retrofitting of existing structures.	Consistent: The Project would implement energy conservation measures in compliance with the CalGreen Code, as discussed in Section 4.8, Greenhouse Gas Emissions and Section 4.6, Energy.
Protect sensitive vegetation and wildlife species, in accordance with State and federal laws and regulations, and to provide for maintenance of supportive habitat for such species in balance with the needs of humans.	Consistent: Mitigation for impacts related to the reduction of habitats for sensitive species in accordance with existing laws and regulations is addressed in Section 4.4, Biological Resources. Impacts would be less than significant after mitigation.

Goal, Policy, or Implementation Measure	Project Consistency
Maintain and promote the retention of natural setting and use of native or adaptable vegetation.	Consistent: The Project would provide limited or no vegetation, reflective of the scattered vegetation on the surrounding desert floor.
Encourage the preservation of Joshua trees, known wildflower displays, or other biologically sensitive flora determined during biological surveys.	Consistent: There are no Joshua trees on the site. Mitigation for impacts related to the reduction of habitats for sensitive species is addressed in Section 4.4, Biological Resources.
Ensure that development expands without adversely impacting significant natural resources.	Consistent: Mitigation for impacts related to the reduction of habitats for sensitive species is addressed in Section 4.4, Biological Resources. Impacts would be less than significant after mitigation.
Continue to require biota studies as a requirement of DRC for all new subdivisions, large apartment complexes, commercial and industrial projects.	Consistent: A biological resource assessment, focused surveys, and jurisdictional delineation have been prepared for the Project site, as summarized in Section 4.4, Biological Resources. Mitigation measures have been provided to reduce adverse impacts to sensitive biological resources.
Preserve historical and cultural resources which may exist and are of significant value to the community now and in the future.	Consistent: Mitigation for impacts to cultural resources is addressed in Section 4.5, Cultural Resources. Mitigation measures have been provided to reduce adverse impacts to sensitive cultural resources.
Implementation Measures	
C-1. The City shall require that new development proposals provide evidence that sufficient water supply, including fire flow, exists to serve the project without impacting service to existing uses or resulting in the long-term decline and overdraft of groundwater sources.	Consistent: Adequate water supply would be available to the Project, as evaluated in the WSA for the Project and summarized in Section 4.18, Utilities and Service Systems. The Project would construct the necessary on-site and off-site water system improvements (including water line connection and extension, fire hydrants, and an additional pump) to serve the Project, as required by the City and in accordance with City standards.
 C-2. The City shall implement the following measures to address water conservation goals and policies in the General Plan Planning Area: Work with the South Lahontan Regional Water Quality Control Board to ensure that future use of the Chaffee and Proctor sub-units by development in the General Plan Planning Area, other water districts, or by individual users will not lead to overdraft of groundwater sources. Require new development proposals to provide evidence that water conservation measures such as the use of drought-tolerant landscaping, application of new technologies (such as low-flow toilets), implementation of recycling measures for different land uses, and Best Management Practices (BMPs have been incorporated into the project. 	Consistent: Adequate water supply would be available to the Project, as evaluated in the WSA for the Project and summarized in Section 4.18, Utilities and Service Systems. The Project would implement water conservation measures and would construct the necessary water system improvements to serve the Project, as required by the City and in accordance with City standards.

CALIFORNIA CITY GENERAL PLAN CONSISTENCY

C-3. The City shall implement the following measures to address water quality goals and policies in the General Plan Planning Area:

Goal, Policy, or Implementation Measure

- Work with local, regional, and State agencies to provide or a cost-effective and equitable means of reducing urban runoff and addressing water quality. If required, continue to use National Pollutant Discharge and Elimination System (NPDES permits, including Best Management Practices (BMPs for new development projects to help reduce runoff. Examples of BMPs include: schedule excavation and grading work for dry weather, covering stockpiles and excavated soil with tarps or plastic sheeting, sweeping dry spilled materials immediately, and never hosing down dirty pavement or impermeable surfaces where fluids have spilled.
- Require new development proposals to provide evidence of how urban runoff will be reduced and water quality will be addressed prior to issuance of grading and/or building permits.
- Require new development proposals to comply with City Resolution No. 08-01-1941 related to the suitability of new development to occur with a proposed use of a septic system.
- Require new development proposals with a proposed septic system to conduct a soils analysis to determine if the soils are suitable for such systems.

C-6 The City shall implement the following measures associated with air pollution emissions from new development proposals in the General Plan Planning Area:

- Evaluate proposals for discretionary projects to ensure that the project complies with air quality standards.
- For development proposals not subject to a discretionary approval or environmental review, an air quality analysis shall be required as a part of the site plan review (DRC) process.
- For development proposals subject to a discretionary approval (General Plan Amendment, Zone Change, or Subdivision) and environmental review, an air quality analysis shall be required as a part of the environmental review process.

Project Consistency

Consistent: The Project would implement construction BMPs included in the Stormwater Pollution Prevention Plan for the Project, as required under the NPDES Construction General Permit.

On-site retention basins would be provided to maintain pre-development runoff volumes and rates and remove pollutants in the storm water. The existing and proposed hydrology, including permanent BMPs to reduce runoff flows and storm water pollutants is discussed in Section 4.10, Hydrology and Water Quality.

The Project would be connected to the City's sewer system and would not utilize septic systems.

Consistent: The air quality impacts of the Project are analyzed in Section 4.3, Air Quality. The analysis includes estimates of construction-related pollutant emissions and long-term operational emissions, as well as discussions related to toxic air contaminants, carbon monoxide hotspots, objectionable odors, Project consistency with the EKAPCD Ozone Attainment Plan, and Valley Fever.

Goal, Policy, or Implementation Measure	Project Consistency
C-8. As applicable, new development proposals shall address the requirements of the Kern County Air Pollution Control District (APCD) Permit to Operate. The APCD maintains Permit to Operate requirements that direct owners/operators of certain types of stationary equipment to obtain an Authority to Construct (ATC) from the District. As part of this process, the need for emission control equipment is assessed and the APCD determines whether a Human Health Risk Assessment must be prepared. Future uses subject to the requirements for a health risk assessment are typically those using substances subject to the National Emission Standards for Hazardous Air Pollutants issued pursuant to Section 112 of the federal Clean Air Act (42 U.S. Code, 7401, et seq.) and Sections 44340 to 44383 of the California Health and Safety Code. Risks must be reduced such that facilities do not emit carcinogenic to toxic air contaminants that could indirectly or cumulatively exceed individual cancer risk thresholds established by the APCD. If required, a project must provide proof of compliance with the APCD regulations prior to issuance of a building permit or certificate of occupancy, as appropriate.	Consistent: The Project would comply with pertinent EKAPCD regulations, as discussed in Section 4.3, Air Quality.
C-9. The City shall promote energy conservation in the General Plan Planning Area through the following measures: Review construction plans prior to the issuance of building permits to ensure that energy efficiency requirements of Title 24 of the California Administrative Code are met. Encourage energy conservation programs in both the private and public projects.	Consistent: The Project would implement energy conservation measures under Title 24 and the CalGreen Code, as discussed in Section 4.8, Greenhouse Gas Emissions and Section 4.6, Energy.
C-10. The City shall require that construction of new development proposals comply with the City's Grading Code and all adopted applicable dust control measures of the Kern County Air Pollution Control District (APCD). C-12. The following measures shall be incorporated into new development proposals, as applicable, to address the goals and policies of the General Plan related to air quality. Verification of these measures shall occur during site plan review and building inspection: • During grading operations, project applicant/developer shall be responsible for the application of water to the development site at least twice daily to mitigate the impact of dust and PM10 emissions. Spraying should be sufficient to ensure that soils remain damp, with the frequency of spraying dependent on weather conditions. Graded areas that are to	Consistent: The Project would implement dust control measures in accordance with City and EKAPCD regulations, as discussed in Section 4.3, Air Quality.
weather conditions. Graded areas that are to be left undeveloped or unpaved for more than six weeks are to be sufficiently dust controlled through use of an applied surface agent, daily watering, or revegetated.	

Goal, Policy, or Implementation Measure	Project Consistency
During grading operations, all activity should be restricted to periods of low wind generally considered under 25 miles per hour, to reduce dust emissions.	
Construction speed limits will be posted at 15 miles per hour. Preparation of roadway surfaces in a phased manner (where segments of the route are graded in succession) will greatly minimize the amount of time the surfaces are left exposed, thereby reducing vehicle-related dust emissions.	
C-13. The City shall require the preservation of biological resources by implementation of the following	Consistent: A biological resource assessment, focused surveys, and jurisdictional delineation have
measures: • Prior to issuance of a grading or building permit, new development proposals, including on previously disturbed land, shall be required to complete a general biological resources assessment to identify the presence of any sensitive biological resources, including but not limited to sensitive habitat, sensitive plant species, and sensitive wildlife species, jurisdictional drainage features, and wildlife corridors on the project site. Recommendations and/or mitigation measures shall be incorporated into project as conditions of approval.	been prepared for the Project site, as summarized in Section 4.4, Biological Resources. Mitigation for impacts related to the reduction of habitats for sensitive species is provided to reduce impacts to less than significant levels.
C-14. The City shall require the preservation of historical and cultural resources by implementation of the following measures: • Encourage local groups and schools to enhance and promote historical resources and community activities for all residents within the General Plan Planning Area.	Consistent: A Cultural Resources Inventory has been prepared for the Project and is summarized in in Section 4.5, Cultural Resources. Mitigation for impacts to cultural resources is provided to reduce impacts to less than significant levels.
Prior to issuance of a grading or building permit, new development proposals shall be required to complete records and literature search and/or a Phase 1 Assessment to identify the presence of any specific cultural resources and/or Native American sacred lands at the project site. Recommendations shall be incorporated into project as conditions of approval.	
Safety Element	
Overall Goal: Protection of the community from known risks as a result of natural and human induced hazards, including geologic and seismic hazards, flood hazards, fire hazards, and aircraft over flight hazards.	Consistent: The Project would not be exposed to geologic and seismic hazards with compliance with existing regulations, as discussed in Section 4.7, Geology and Soils. The Project site is not located in an area with flood hazards, as discussed in Section 4.10, Hydrology and Water Quality. The Project would not be exposed to fire hazards. Project impacts on aircraft operations would be less than significant after mitigation, as discussed in Section 4.9, Hazards and Hazardous Materials.

Goal, Policy, or Implementation Measure	Project Consistency
Goals	
Protect the health, safety, and welfare of the community from hazards related to seismic activity. Minimize serious physical damage form geologic and seismic hazards to structures used for human occupancy and to critical facilities and structures where large numbers of people congregate.	Consistent: There is no known earthquake fault on the site. The Project would be designed and built to withstand seismic ground shaking hazards, in accordance with the CBC and the City Building Code. This is discussed in Section 4.7, Geology and Soils.
Insure the continuity of vital services, functions, and facilities after a seismic event.	
Protect residents, businesses, and structures from human-induced hazards related to ground transportation, aircraft over flight, hazardous materials, and other human activities.	Consistent: Hazardous materials use during construction and operation of the Project would occur in accordance with pertinent regulations. Project impacts on aircraft operations would be less than significant after mitigation. These issues are discussed in Section 4.9, Hazards and Hazardous Materials.
Provide and implement effective emergency services that will protect the health, safety, and welfare of residents and workers within the community.	Consistent: An emergency plan shall be prepared for the Project, to address disaster preparedness, emergency response, evacuation, and restoration within the site.
Policies	
Development shall be prohibited in areas where measures to correct identified geologic or seismic hazard are not feasible.	Consistent: The Project would be designed and built to ensure the structural stability of proposed buildings and site improvements, in accordance with the CBC
Minimize the potential damage to structures and loss of life that could result from earthquakes.	and the recommendations of the geotechnical investigation for the Project. This is discussed in Section 4.7, Geology and Soils.
Safety measures required by the Uniform Building Code for Seismic Zone 4 for construction of new buildings are hereby incorporated by reference.	Section 4.7, Geology and Solis.
Require all generators and processors of hazardous waste develop long-term waste management programs in compliance with all applicable federal, state, county, and local requirements.	Consistent: Hazardous materials use during construction and operation of the Project would occur in accordance with pertinent regulations, as discussed in Section 4.9, Hazards and Hazardous Materials.
Ensure that hazardous materials used by commercial and industrial land uses are properly transported, handled, and used, and that information on their handling, transport, and use is available to the California City Fire Department and other safety agencies in accordance with the Fire Code.	
Require that new development proposals be consistent with the Kern County Airport Land Use Compatibility Plan in order to eliminate hazards due to land use conflicts with the California City Municipal Airport, the Mojave Airport, Edwards Air Force Base, and other military over flight activities.	Consistent: Hazardous materials use during construction and operation of the Project would occur in accordance with pertinent regulations. While the site is subject to occasional aircraft overflight associated with EAFB operations, the Project would not conflict with operations at EAFB. and would implement MM HAZ-1, as discussed in Section 4.9, Hazards and Hazardous Materials.
Ensure that new development does not create a burden on adequate levels of emergency response services, including fire protection services and law enforcement services.	Consistent: The Project would not result in significant impacts on fire and police protection services with implementation of mitigation measures, as discussed in Section 4.15, Public Services and Recreation.

Goal, Policy, or Implementation Measure	Project Consistency
Ensure that new development proposal shall provide street widths and clearance areas are consistent with the City's requirements and, therefore, adequate to accommodate fire protection and emergency response vehicles.	Consistent: The Project would provide the necessary fire alarm and sprinkler systems, fire flows, street widths and clearances, and other fire safety measures, as required by City's building regulations. This is discussed in Section 4.15, Public Services and
Continue to enforce the Health, Fire, and Building standards for all new development proposed and rehabilitation of existing structures.	Recreation.
Continue to monitor water supply for fire-flow to insure adequacy of fire protection services.	
Review all new development proposals for fire safety considerations.	
Require the installation of heat and/or smoke detection early warning and fire suppression systems.	
Continue to adopt and enforce the latest national building, plumbing, mechanical, and fire prevention codes.	Consistent: The Project would be constructed in accordance with the City's building, plumbing, mechanical, and fire prevention codes.
Implementation Measures	
S-1. The City shall require that all new development be subject to a preliminary geotechnical report to identify potentially hazardous geologic and soils conditions including the potential for seismic hazards. If the preliminary geologic report indicates that geologic or soils conditions could be unstable, a geotechnical investigation shall be prepared indicating the suitability of any proposed or additional development on the site and any corrective action needed to prevent structural defects or ground failure. The geotechnical investigation shall analyze: seismic hazards; geologic hazards; depth to groundwater; soil conditions (texture, consistency, structure, permeability, shrink-swell potential, strength); and the percentage of slopes and the potential for landslides.	Consistent: A geotechnical investigation would have to be prepared for the Project and the recommendations of the investigation implemented as part of the Project design and construction. This is discussed in Section 4.7, Geology and Soils.
S-9. The City shall require that transporters of hazardous waste travel on designated Commercial Hazardous Waste Shipping Routes.	Consistent: The transport of hazardous materials and wastes to and from the site would use Twenty Mule Team Parkway and adjacent freeways (State Route [SR] 395, SR 14 and SR 58) and would comply with federal and State regulations. The freeways are designated National Hazardous Material Routes (FMCSA 2017).
S-12. The City shall require that new development proposals be reviewed for compatibility with the adopted Airport Land Use Compatibility Plan. Appropriate limitations and conditions shall be incorporated into the conditions of the project approval to address compatibility with the California City Municipal Airport, the Mojave Airport, and encroachment issues for the Edwards Air Force Base, Naval Air Weapons Station China Lake, and the Military Complex Airspace. Incompatible uses shall not be permitted unless appropriate findings regarding public health, safety, and military readiness can be made.	Consistent: As discussed in Section 4.9, Hazards and Hazardous Materials, the Project would not conflict with the encroachment zones for Edwards Air Force Base and would not create aircraft overflight hazards with the implementation of mitigation measures.

Goal, Policy, or Implementation Measure	Project Consistency	
S-23. The City shall require that new development proposals demonstrate the availability of fire, police, emergency response, and solid waste disposal services during the environmental review and discretionary approval process.	Consistent: Project impacts on fire, police, emergency response are discussed in Section 4.15, Public Services and Recreation. Project impacts on solid waste disposal services are discussed in Section 4.18, Utilities and Service Systems.	
S-25. The following measures shall be implemented to ensure adequate fire and police protection services in the incorporated areas of the City: a) All new development proposals shall be reviewed by the California City Fire Department and the California City Police Department to ensure the continuation of adequate levels of service. b) If additional Fire Department or Police	Consistent: The Project has been reviewed by the California City Fire Department and the California City Police Department Project and impacts on fire, police, emergency response is discussed in Section 4.9, Hazards and Hazardous Materials and Section 4.15, Public Services and Recreation. No additional Fire Department or Police Department station sites are required to serve the Project.	
Department station sites are determined to be required, sites shall be identified and mechanisms to obtain these sites shall be defined. These shall include, but not be limited to, the dedication of land for such purposes or payment of proportional share of fees as a condition of development. c) The City will continue to work with local organizations and the County Sheriff's Department and Fire Department to continue administration of the Mojave Desert Community		
Response Plan. S-27. The City shall review all new development proposals for fire safety considerations. This shall include the economic impacts on the City's ability to provide adequate levels of service. Items such as the incremental increase in staffing and requirements for equipment shall be analyzed and appropriate project level mitigation measures shall be applied. Measures may include specialized fire protection consideration to be incorporated into the design of the project and the contribution of funding for both staffing and equipment needs.	Consistent: The Project would be constructed in accordance with the City's building and fire prevention codes, as discussed in Section 4.15, Public Services and Recreation.	
Noise Element		
Overall Goal: Provide a noise environment that protects residents and workers from the long-term effects of excessive noise exposure while allowing for the successful development of businesses, transportation facilities, and aviation facilities within and surrounding California City.	Consistent: The Project would not result in significant adverse impacts related to noise, with the implementation of regulatory requirements and mitigation measures, as discussed in Section 4.13, Noise.	
Goals		
To protect residents and workers in the City from the harmful and annoying effects of exposure to excessive noise.	Consistent: The Project would not result in significant adverse impacts related to noise after mitigation, as discussed in Section 4.13, Noise.	

Goal, Policy, or Implementation Measure	Project Consistency	
Policies		
Noise created by existing stationary noise sources which undergo modifications or proposed stationary noise sources that may increase noise levels shall be mitigated so as not to exceed the noise level standards for noise-sensitive land uses as defined in the Noise Element. This policy does not apply to noise levels associated with agricultural operations.	Consistent: The Project would not result in significant adverse impacts related to noise, with the implementation of regulatory requirements and mitigation measures, as discussed in Section 4.13, Noise.	
Implementation Measures		
N-1. The City shall review public and private development proposals to determine conformance with the policies of the Noise Element.	Consistent: The Project's consistency with applicable policies in the Noise Element is addressed above.	
N-3. For development proposals subject to a discretionary approval (General Plan Amendment, Zone Change, or subdivision) and environmental review, an acoustical analysis shall be required as a part of the environmental review process. The requirements for the content of an acoustical analysis are provided in Exhibit 2 to the Noise Element.	Consistent: The analysis of noise impacts associated with construction and operation of the Project is provided in Section 4.13, Noise, and follows the City's requirements for an acoustical analysis.	
N-4. The City shall develop and employ procedures to ensure that noise mitigation measures required as a result of an acoustical analysis are implement in the development review and building permit processes.	Consistent: The analysis in Section 4.13, Noise, indicates that the Project would not result in significant adverse impacts related to noise, with the implementation of regulatory requirements and mitigation measures.	
N-14. The City shall restrict the hours of activity per Title 5, Article 4, Noise and Vibration, Section 5-1.407 of the CCMC: "(d) Noise sources associated with or vibration created by construction, repair or remodeling of real property or during authorized seismic surveys under the following conditions: (1) The activities occur between the hours of 6:00 a.m. and 8:00 p.m. between May 15 and September 15 of each year of between the hours of 7:00 a.m. and 8:00 p.m. during the remainder of the year. (2) The activities do not take place on Sundays or Federal holidays".	Consistent: The Project would comply with existing City regulations, as discussed in Section 4.13, Noise.	
Source: California City 2009 (Goals, Policies and Implementation Measures).		

As provided above, no conflict with the California City General Plan and relevant goals, policies and implementation measures would occur with implementation of the Project.

The Project site is located in Planning Subarea 5, which is considered as a Future Urban Area. This site is designated as Controlled Development; Public Parks and Recreation; and Public Schools and Conservation Land. The Controlled Development; Public Parks and Recreation; and Public Schools designation allows a variety of land uses that are consistent with the goals, objectives, and policies of the City's General Plan and address the social, environmental, and economic concerns of the community. This designation allows the development of park/open space and public/quasi-public uses that benefit the entire community. As a quasi-public use, the Project would be consistent with this designation. Conservation Land includes land designated for the protection, preservation and conservation of unique areas. As previously indicated, the sliver of land along the northern edge of the Project site that is designated as Conservation Land appears to be a mapping error. This sliver contains no unique features or resources that differ

from the surrounding lands and the RA and O zoning is consistent throughout the Project site and the surrounding area. The Controlled Development; Public Parks and Recreation; and Public Schools and Conservation Land designations are also consistent/compatible with the RA and O zoning districts for the Project site.

California City Zoning Regulations

The purposes of the City's Zoning Regulations and Project consistency with these purposes is provided in Table 4.11-2.

TABLE 4.11-2 CALIFORNIA CITY ZONING CONSISTENCY

Purpose	Project Consistency
To provide a specific means to implement the physical development of the City in such a manner as to achieve progressively the general arrangement of land uses depicted in the General Plan;	Consistent: The Project is consistent with the land use designations of the site in the City's General Plan.
To foster a wholesome, serviceable and attractive living environment, the beneficial development of areas which exhibit conflicting patterns of use; and the stability of existing land uses which conform with objectives, policies, principles and standards of the General Plan;	Consistent: The Project is consistent with relevant goals and policies and with land use designations of the Project site in the City's General Plan.
To prevent excessive population densities and overcrowding of land with structures;	Consistent: The Project would be located on undeveloped land and would not lead to excessive population densities or the overcrowding of land with structures.
To promote a safe, effective traffic circulation system, the provision of adequate off-street parking and truck loading facilities and the appropriate location of community facilities;	Consistent: The Project would provide on-site vehicle parking areas and truck loading areas. Access and roadway improvements would be provided, as discussed in Section 4.16, Transportation.
To protect and promote appropriately located commercial and industrial activities to preserve and strengthen the City's economic base;	Consistent: The Project would generate employment opportunities for local residents; create a demand for goods and services; and would generate taxes to strengthen the City's economic base.
To protect and enhance real property values and the City's natural assets;	Consistent: The Project would enhance the value of the parcel that includes the Project site by introducing development on the unimproved portion of the property. In addition, the Project site is not proposed as Open Space and would not adversely affect the City's natural assets, as there are large expanses of the desert floor that remain undeveloped in the surrounding area.
To ensure unimpeded development of such new urban expansion that is logical, desirable and in conformance with objectives and policies of the General Plan; and	Consistent: The Project does not represent urban expansion but will serve as an expansion of an existing use on the same parcel. Also, the Project is consistent with relevant goals and policies in the City's General Plan, as discussed in Table 4.11-1 above.
To provide and protect open space in accordance with policies of the open space element of the General Plan.	Consistent: The Project site is not designated as Open Space in the City's General Plan Designation Map.

As provided above, no conflict with the purposes of the City's Zoning Regulations would occur with implementation of the Project.

As stated above, the site is zoned RA and O. Governmental or quasi-governmental correction, probation or prison facilities and services are conditionally allowed in the RA district. Thus, no zone change is necessary to implement the proposed correctional facility.

The Project would be subject to site plan review and approval of the site plan for compliance with applicable zoning regulations. The City's zoning regulations also requires a conditional use permit (CUP) for a correctional facility (e.g., governmental or quasi-governmental correction, probation or prison facilities and services) in the RA district. The Project includes an application for a CUP and the CUP would include conditions of approval that would be imposed on the Project. No conflict with the City's Zoning Regulations would occur with implementation of the Project. Impacts would be less than significant and no mitigation is required.

Kern COG's Regional Plans

The Project would not conflict with regional plans, policies, or regulations related to regional land use, transportation, air quality, or other issues. Consistency with Kern COG's Regional Blueprint, RTP/SCS, and RHNA Plan is provided below.

Regional Blueprint

The Smart Growth Principles in the Regional Blueprints are generally not applicable to the Project due to the type and size of the Project against the regional scope of the Smart Growth Principles. However, the Project would lead to the creation of jobs in California City, which would enhance the economic vitality of the region. Thus, the Project will support one of the Smart Growth Principles.

For the Kern COG Blueprint, Table 4.11-3 assesses the Project's consistency with the vision, principles and growth scenario that was developed during the outreach program for this blueprint. As shown in the analysis, the Project would not conflict with the Kern COG Blueprint.

TABLE 4.11-3 REGIONAL BLUEPRINT CONSISTENCY

	Value	Project Consistency
	Maintenance of unique, livable communities	Consistent: The Project would not be located in an existing community in California City and thus, would not affect the livability of the City's central core.
Protection of the environment	Protection of the environment	Consistent: The Project would avoid or reduce impacts on the environment, as discussed throughout this EIR.
	Building of the economy	Consistent: The Project would create jobs that would expand the local economy, as well as create a demand for goods and services needed for operation of the Project.
Vision	Expansion of mobility	Consistent: The Project would include the construction of roadway improvements to provide access to the site, indirectly completing the roadway network in the City.
	Preparation of youth for the future	Not Applicable: The Project would not involve the youth of the City or the region.
	Preservation of health and safety	Consistent: The Project would comply with relevant laws and regulations that promote public health and safety. In addition, the Project would not create any public health or safety hazard.
	Enhancement of parks and recreation	Not Applicable: The Project would not create a demand for regional parks and recreational facilities. On-site recreational facilities would be provided for inmates.
Expansion and coordination of planning efforts		Consistent: The Project would be subject to review and approval by the City.
	Conservation of energy and natural resources	Consistent: The Project would implement energy and water conservation measures, as discussed in Section 4.8, Greenhouse Gas Emissions, Section 4.18, Utilities and Service Systems, and Section 4.6, Energy.
	Provision of adequate and equitable services	Consistent: The Project would not create undue demand for public services, as discussed in Section 4.15, Public Services and Recreation. Impacts would be less than significant.
Guiding Principles	Enhancement of economic vitality	Consistent: The Project would create jobs that would expand the local economy, as well as create a demand for goods and services needed for operation of the Project.
	Provision of housing choices	Not Applicable: The Project does not propose housing development but would provide housing for inmates.
	Use and improvement of existing community assets and infrastructure	Consistent: The Project would utilize existing infrastructure near the site, including the upgrade of off-site utility infrastructure systems to serve the Project.
	Encouragement of compact mixed-use development	Not Applicable: The Project does not propose a mixed use development but would be located beside an existing correctional facility.

TABLE 4.11-3 REGIONAL BLUEPRINT CONSISTENCY

	Value	Project Consistency
	Provision of transportation options	Consistent: The Project would include construction of an access road to provide direct access to the site.
Conservation of land		Consistent: The Project would provide setback areas along the northern, eastern and western site boundaries. As previously indicated, the sliver of land along the northern edge of the Project site that is designated as Conservation Land appears to be a General Plan mapping error. This sliver contains no unique features or resources that differ from the surrounding land and the RA and O zoning is consistent throughout the Project site and the surrounding area.
	Increased civic engagement	Consistent: Public meetings and hearings, as prescribed by the discretionary land use approval and CEQA process would be conducted as part of the environmental review process for the Project.
Growth Scenario	Development of residential and employment centers that include metropolitan, community, town, and village centers with its own population, commercial, residential, and employment bases	Not Applicable: The Project would not be suitable within a residential or employment center, and thus, is not located in one.
	Appropriately-scaled mixed-use buildings	Not Applicable: The Project does not propose a mixed use development but buildings would have a low profile to blend with the surrounding desert floor.
	Walkable design	Not Applicable: While there are informal pathways and dirt roads in the area and the Project would provide internal walkways and roads, but the location of the site is not conducive to walking.
	Improved public transit	Not Applicable: Public transit is not available near the site.
	Tourism	Not Applicable: The Project is not intended to be a source of tourism for the City or the region.
Source: Mintier Harnish 2010 (Values)		

Regional Transportation Plan/Sustainable Communities Strategy

The RTP/SCS serves as the planning document for improving the transportation system of Kern County. Table 4.11-4 assesses the Project's consistency with the goals of the 2018 RTP/SCS.

TABLE 4.11-4 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY CONSISTENCY

RTP Goal/SCS Purpose	Project Consistency	
RTP Goal		
Mobility – Improve the mobility of people and freight	Not Applicable: The Project includes the construction of an access road along the alignment of Gordon Boulevard, but would not change the roadway network in the City. The Project would have no effect on regional mobility or accessibility for the transport of people and freight. However, the Project would include visitation areas and rooms. Video	
Accessibility – Improve accessibility to major employment and other regional activity centers		
Reliability – Improve the reliability and safety of the transportation system	visitation to decrease vehicle trips to the Project site may be implemented depending on contract and other requirements.	
Efficiency – Maximize the efficiency of the existing and future transportation system		
Livability – Promote livable communities	Consistent: The Project would be located away from the residential communities in California City and thus, would not adversely affect the livability of these communities.	
Sustainability – Minimize effects on the environment	Consistent: The Project would avoid or minimize its effects on the environment with the implementation of regulatory requirements and mitigation measures, as discussed in this EIR. The Project would implement water and energy conservation measures to reduce natural resource demands.	
Equity – Ensure an equitable distribution of the benefits among various demographic and user groups	Consistent: The Project would pay for and construct the needed access road and infrastructure upgrades to serve the Project. The Project would not lead to benefits or disadvantages to specific user groups.	
SCS Purposes		
Improve economic vitality	Consistent: The Project would create jobs that would improve the local economy, as well as create a demand for goods and services needed for operation of the Project. The Project would improve the economic vitality of the City.	
Improve air quality	Consistent: The Project would comply with existing EKAPCD regulations and programs to improve air quality in the Mojave Desert Air Basin and would implement mitigation measures to reduce Project-generated pollutant emissions, as discussed in Section 4.3, Air Quality.	
Improve communities' health	Not Applicable: The Project site is not located in an area where existing or proposed bikeways and trails are located and where transit services are available. Such bikeways and trails, on the project site, are prohibited for security issues.	
Increase transportation and public safety	Not Applicable: The Project site is not located in an area where transit services are available.	
Promote the conservation of natural resources and undeveloped land	Consistent: The Project would be located on undeveloped land but would minimize impacts on adjacent undeveloped land and natural resources, as discussed in Section 4.4, Biological Resources.	
Increase access to community services	Not Applicable: The Project would provide on-site services for inmates and would not generate a direct demand for community services.	
Increase regional and local energy independence	Consistent: The Project would implement energy conservation measures, as discussed in Section 4.8, Greenhouse Gas Emissions and Section 4.6, Energy.	
Increase the opportunities to help shape our community's future	Not Applicable: The Project would not affect public participation in the transportation planning process.	
Source: Kern COG 2018 (Goals and Purposes).		

The RTP/SCS also includes policies and actions that Kern COG will implement to meet the stated goals. Many of these policies and actions relate to aviation, rail, active transportation (walkways and bikeways), and transit that are outside the Project's scope or are administrative functions or projects of the Kern COG and other agencies. The policies to implement a flextime program and create and promote ridesharing and voluntary employer-based incentives are supported by the Project through the establishment of three shifts that start and end outside the typical AM and PM peak hours. This would reduce peak hour traffic and promote ridesharing (e.g., carpools and vanpools) between employees. The RTP/SCS includes policies to maintain and enhance the existing roadway infrastructure and provide for its efficient use and to work with member agencies to preserve existing and future road and highway rights-of-way from the encroachment of sensitive land uses. The proposed CFCC Project supports these policies by providing an access road connecting directly to Virginia Boulevard. The Project also includes 55-foot wide road rightof-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets. The other policies and actions are not applicable or relevant to the Project and would not be affected by the Project. Thus, the Project is consistent with the goals and purposes of the RTP/SCS.

The Project site is in an area that the RTP/SCS assumes would have between 2,000 to 7,500 employees, which would include employees at the CCCC (estimated to have 615 employees) and the proposed CFCC (projected to have as many as 1,000 employees). No conflict with the RTP/SCS would occur.

Regional Housing Needs Assessment Plan

The RHNA Plan sets goals for regional housing development by allocating the region's future housing needs to individual jurisdictions, including a quantification of the number of dus by income group that are needed to meet future growth. The Project does not propose the construction of new housing; the demolition of existing housing; or alteration of the City's housing stock. The inmate population that would be brought in by the Project would be housed at the CFCC and would not create a direct demand for housing in the City. No change in the existing or future housing needs of the City would occur with the proposed Project. Indirect demands for housing by relocating employees and inmate families is discussed in Section 4.14, Population and Housing and considered less than significant. Thus, no conflict with the RHNA Plan would be created by the Project.

Regional Growth Forecasts

Growth projections for individual cities and the County have been prepared by Kern COG as part of its regional planning efforts for the RTP/SCS and RHNA Plan. The Project would not conflict with the growth projections used by Kern COG in regional growth forecasts. While the Project would increase employment and population in the City, no direct change in housing stock would occur. Also, no inconsistency with the growth projections used by Kern COG in the development of regional plans would occur. This is discussed in Section 4.14, Population and Housing, of this EIR.

No conflict with existing land use plans and policies would occur with the Project and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

Construction and use of the proposed off-site access road, infrastructure improvements, and public facility upgrades would be located on CoreCivic-owned land, public rights-of-way or publicly

owned facilities and would not conflict with applicable land use plans, policies or regulations. No impact would occur and no mitigation is required.

4.11.5 CUMULATIVE IMPACTS

Cumulative land use impacts can be considered in light of increasing planned and proposed projects in the surrounding area and growth and development in the City of California City and the southeastern section of Kern County due to new development, redevelopment, and increased development densities and intensities. As discussed in Section 2.4, Cumulative Projects, it is assumed that a 0.84 percent annual growth rate could be expected in the City and a 1.0 to 1.1 percent in the unincorporated areas of Kern County.

Cumulative changes in land uses are expected over time, as undeveloped land is developed with urban uses and as rural areas are redeveloped to support higher housing densities and more intensive development. These changes in land uses are expected to be subject to the land use controls and regulations of local jurisdictions (City of California City or the County of Kern) and would be allowed in accordance with adopted land use policies and plans. No land use conflict or incompatibilities are expected.

As discussed above, the Project would not divide an established community and would not conflict with the City's General Plan and Zoning Regulations. Also, the Project would not conflict with Kern COG's regional plans, the California Desert Conservation Area Plan, or the West Mojave Plan. Therefore, the Project would not have an incremental contribution to cumulative land use impacts that may occur with other development projects and future growth and development in the City and the southeastern section of the County. No significant adverse cumulative impacts on land use and planning would occur and no mitigation is required.

4.11.6 MITIGATION MEASURES

There would be no significant adverse impacts related to land use and planning and no mitigation is required.

4.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would not result in significant adverse impacts related to land use and planning. No significant unavoidable or cumulative adverse impacts would occur.

4.11.8 REFERENCES

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4.12 MINERAL RESOURCES

4.12.1 RELEVANT PROGRAMS AND REGULATIONS

California Mineral Resources and Mineral Hazards Mapping Program

The California Mineral Resources and Mineral Hazards Mapping Program is administered by the CGS and is divided into two projects: the Mineral Resources Project and the Mineral Hazards Project. The overall purpose of the program is to provide data on non-fuel mineral resources, such as metals and industrial minerals; information about active and historic mining activities throughout the State (Mineral Resources Project); and naturally occurring mineral hazards, such as asbestos, radon, and mercury (Mineral Hazards Project).

For purposes of analysis, the relevant component of the California Mineral Resources and Mineral Hazards Mapping Program is the Mineral Resources Project, which classifies lands throughout the State that contain regionally significant mineral resources, as required by the Surface Mining and Reclamation Act of 1975 (SMARA). SMARA, as codified in the *California Public Resources Code* (Section 2710 et seq.), provides a comprehensive surface mining and reclamation policy to minimize adverse environmental impacts and to allow mined lands to be restored to a usable condition. SMARA encourages the production, conservation, and protection of the State's mineral resources. Section 2207 of the *California Public Resources Code* provides annual reporting requirements for all mines in the State, and the State Mining and Geology Board (SMGB) is granted authority and obligations under this section. SMARA also mandates the assignment of mineral land classifications to help identify and protect mineral resources in areas that are subject to urban expansion or other irreversible land use commitments that would preclude mineral extraction.

Mineral Resource Zones (MRZs) are areas classified in SMARA by the presence or absence of significant sand, gravel, or stone deposits that are suitable as sources of aggregate, as described below:

- **MRZ-1:** Adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: Adequate information indicates that several mineral deposits are present or that there is a high likelihood of their presence and development should be controlled.
- MRZ-3: The significance of mineral deposits cannot be determined from the available data.
- MRZ-4: There is insufficient data to assign any other MRZ designation.

4.12.2 EXISTING CONDITIONS

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock; gold; sand; gravel; clay; crushed stone; limestone; diatomite; salt; borate; potash; and geothermal, petroleum, and natural gas resources. Construction aggregate, another mineral resource, refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland-cement-concrete (PCC) aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, fill, or other construction materials.

The Project site and surrounding areas, including the proposed off-site infrastructure improvements, are not located in an area that the California Department of Conversation, Division of Mines and Geology (CDMG) has identified as having borates, limestone, gold, dimension

stone, silica and pozzolan or otherwise "classified" mineral deposits (CDMG 1999a). However, areas to the northeast and southwest of the site contain these minerals and are subject to mining operations (CDMG 1999b).

The City's General Plan does not identify the presence of mineral resources in or near the City. No mining operations are currently ongoing in the City; the nearest mining operation is a borax mining pit near the community of Boron, southeast of the site (California City 2009).

Based on the California Department of Conservation maps, significant oil and gas resources are present in the western portion of Kern County but not in the eastern portion of the county or in the City of California City and the surrounding area (DOGGR 2001). California Department of Conservation maps showing oil wells in Kern County indicate that there are no oil wells in or near the site but there are a few dry holes in the City and the surrounding areas. The nearest dry hole is located approximately 3 miles northeast of the site that has been plugged and abandoned. No oil pumping operations are ongoing at this well, and no underlying resources are present in the area (DOGGR 2018).

4.12.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on Mineral Resources if it would:

Threshold 4.12a: Result in the loss of availability of a known mineral resource that would be

of value to the region and the residents of the State.

Threshold 4.12b: Result in the loss of availability of a locally important mineral resource

recovery site delineated on a local general plan, specific plan or other land

use plan.

4.12.4 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.12a: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

As discussed above regarding MRZ and mineral resources in the Project vicinity, the Project site is not known to contain mineral deposits of any economic importance or any otherwise "classified" mineral deposits. While it is known that areas to the northeast and southwest of the Project site contain these minerals and are subject to mining operations, there is no evidence of aggregate or other mineral resources being located on the Project site itself or in the adjacent properties. Therefore, Project implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State, nor would it create the loss of availability of a locally important mineral resource recovery site. Therefore, no impacts would occur with implementation of the proposed Project.

Threshold 4.12b: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The proposed Project and associated infrastructure improvements would not occur in areas identified by the City or the State to have oil, gas, or mineral resources. Also, no future mining operations are expected in or near the site due to the lack of resources. Therefore, no impacts

would occur from the project related to the loss of availability of a locally important mineral resource.

4.12.5 CUMULATIVE IMPACTS

No ongoing mining operations are located in or near the site or in the City. Also, no regionally or locally significant mineral resources are located in or near the site that may be subject to future extraction activities. Therefore, the proposed Project and associated infrastructure improvements would not result in or contribute to cumulative impacts related to the loss of availability of regionally or locally important mineral resources. No mitigation is required.

4.12.6 MITIGATION MEASURES

No significant adverse impacts on mineral resources have been identified. Therefore, no mitigation measures are required.

4.12.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant adverse direct, indirect or cumulative impacts on mineral resources would occur with the Project.

4.12.8 REFERENCES

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4.13 NOISE

This section analyzes potential noise impacts associated with development of the proposed Project. This noise and vibration analysis in this section provides background information on noise and noise assessment criteria; presents existing noise levels in the Project area; and examines noise impacts that could potentially occur during construction and operation of the Project, the City's wastewater treatment plant (WWTP) and the offsite utility improvements. When necessary, mitigation measures are recommended to meet the City's noise standards.

Noise and Vibration Definitions

"Sound" is a vibratory disturbance created by a moving or vibrating source that is capable of being detected by the hearing organs. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment.

Decibels and Frequency

In its most basic form, a continuous sound can be described by its frequency or wavelength (pitch) and its amplitude (loudness). Sound pressure levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Groundborne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent structures. The frequency of a vibrating object describes how rapidly it is oscillating. The number of cycles per second of oscillation is the vibration frequency, which is described in terms of hertz (Hz). The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

Perception of Noise and Vibration

Noise

The human ear is not equally sensitive to all frequencies on the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are written dB(A) or dBA. Table 4.13-1, Noise Levels for Common Activities shows the relationship of various noise levels in dBA to commonly experienced indoor and outdoor activities.

TABLE 4.13-1 NOISE LEVELS FOR COMMON ACTIVITIES

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
-	110	Rock Band
Jet Fly-over at 300 m (1,000 ft)	100	-
Gas Lawn Mower at 1 m (3 ft)	90	-
Diesel Truck at 15 m (50 ft) at 80 km/hr (50 mph)	80	Food Blender at 1 m (3 ft); Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower at 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area, Heavy Traffic at 90 m (300 ft)	60	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	50	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
_	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing 0 Lowest Threshold of Human Hearing		Lowest Threshold of Human Hearing
dBA: A-weighted decibels; m: meter; km/hr: kilometers per hour; ft: feet; mph: miles per hour		
Source: Caltrans 2013a.		

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice or half as loud, respectively.

As noise travels from the source to the receiver, noise changes both in level and frequency spectrum. The most obvious change is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance (noise attenuation) depends on a number of factors, such as ground absorption, atmospheric effects, and shielding (as by natural and man-made barriers). Two types of site conditions are commonly used in noise prediction: soft site and hard site conditions. Hard sites (i.e., sites with a reflective surface between the source and the receiver, such as parking lots or smooth bodies of water) receive no excess ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. Soft sites are sites that have an absorptive ground surface (e.g., soft dirt, grass, or scattered bushes and trees) and receive an excess ground attenuation value of 1.5 dBA per doubling of distance.

Vibration

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors. The primary concern from vibration is the ability to be intrusive and annoying to residents and other vibration-sensitive land uses. Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. The high-frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source.

Noise and Vibration Metrics

Several rating scales (or noise "metrics") exist to analyze the effects of noise on a community. These scales include the equivalent noise level (L_{eq}), the community noise equivalent level (CNEL), and the day-night average sound level (L_{dn}). Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq} , which is the equivalent noise level for that time period. The period of time averaging may be specified; for example, $L_{eq(3)}$ would be a three-hour average. When no period is specified, a one-hour average is assumed. It is important to understand that noise of short duration (i.e., a time period substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period. Another measure of noise levels is L_N , where N is the percentage of time that the noise level is exceeded. For example, L_{10} is the noise level that is exceeded 10 percent of the time.

To evaluate community noise impacts, a descriptor was developed that accounts for human sensitivity to nighttime noise. The descriptor is the L_{dn} , which represents the 24-hour average sound level with a penalty for noise occurring at night. The L_{dn} computation divides the 24-hour day into 2 periods: daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM). The nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels. CNEL is similar to L_{dn} except that it separates a 24-hour day into 3 periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5 dBA penalty and nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels.

Vibration levels are usually expressed as single-number measurements of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second (in/sec). As it is relates to the stresses that are experienced by buildings, ppv is often used to monitor blasting vibration.

Sensitive Receptors

Noise-sensitive receptors are generally considered to be humans who are engaged in activities or who are utilizing land uses that may be subject to the stress of significant interference from noise. Activities usually associated with sensitive receptors include but are not limited to talking, reading, and sleeping. Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals and places where quiet is an essential element of the intended purpose.

Vibration-sensitive receptors are generally considered to be humans who are engaged in activities or who are utilizing land uses that may be subject to significant interference from vibration. Activities and land uses often associated with vibration-sensitive receptors are similar to those associated with noise-sensitive receptors. Construction vibration is generally associated with pile

driving and rock blasting. Occasionally, large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity. Vibration generated by construction activity has the potential to cause structural damage (i.e., cracking of floor slabs, foundations, columns, beams, or wells) or cosmetic/architectural damage (i.e., cracked plaster, stucco, or tile). Although it is possible for vibration from construction projects to cause building damage, the vibration from construction activities is almost never of sufficient amplitude to cause more than minor cosmetic damage to buildings.

Sensitive noise and vibration receptors are defined in the Noise Element of the City of California City General Plan Final as "Noise-Sensitive Land Use: Residential land uses, transient lodging, schools, libraries, churches, hospitals and nursing homes." Commercial and industrial uses are generally not considered noise- and vibration-sensitive uses, unless noise and vibration would interfere with their normal operations and business activities. Prisons and detention facilities, being less common land uses, are not specified as being sensitive noise and vibration receptors, but are analyzed as sensitive receptors in this EIR to ensure a conservative analysis, although this means noise impacts may be over-stated. In addition, to the east of the proposed CFCC facility, there may be future residential uses located in areas that were subdivided several decades ago, though City staff is not aware of any plans for such construction. Other sensitive receptors include residential uses located proximate to the proposed offsite utilities lines and the WWTP improvements.

4.13.1 RELEVANT PROGRAMS AND REGULATIONS

State

California Land Use Compatibility Guidelines

Title 24 of the *California Code of Regulations*, also known as the California Building Standards Code, or more commonly as the California Building Code, requires that residential structures other than detached single-family dwellings be designed to prevent exterior noise intrusion so that the interior CNEL attributable to exterior sources do not exceed 45 dBA in any habitable room with closed windows (CBSC 2015).

Noise compatibility guidelines from the State General Plan Guidelines are shown below in Table 4.13-2, California Land Use Compatibility Guidelines (OPR 2003). The noise compatibility guidelines are intended to be incorporated into land use planning decisions to reduce future noise and land use incompatibilities. For example, as shown below in Table 4.13-2, a CNEL at multiple-family homes that does not exceed 65 dB is considered normally acceptable, while levels exceeding 75 dB would be considered clearly unacceptable. These guidelines are primarily used to assess transportation noise impacts to new developments.

TABLE 4.13-2 CALIFORNIA LAND USE COMPATIBILITY GUIDELINES

Normally Acceptable	Conditionally Acceptable	Normally Acceptable	Clearly Unacceptable
50–60	55–70	7075	75–85
50–65	60–70	70–75	75–85
50–65	60–70	70–80	80–85
50–70	60–70	70–80	80–85
_	50–70	_	65–85
_	50–75	_	70–85
50–70	67–75	_	77–85
50–75	70–80	80–85	_
50–70	67–77	75–85	_
50–75	70–80	75–85	
	Acceptable 50–60 50–65 50–65 50–70 — 50–70 50–75 50–70	Acceptable Acceptable 50-60 55-70 50-65 60-70 50-65 60-70 50-70 60-70 - 50-70 - 50-75 50-75 70-80 50-70 67-77	Acceptable Acceptable Acceptable 50-60 55-70 7075 50-65 60-70 70-75 50-65 60-70 70-80 50-70 60-70 70-80 - 50-70 - 50-75 - 50-75 50-75 70-80 80-85 50-70 67-77 75-85

NORMALLY ACCEPTABLE:

Specified land use is satisfactory, based upon the assumption that any buildings involved are of special noise insulation requirements.

CONDITIONALLY ACCEPTABLE:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

NORMALLY UNACCEPTABLE:

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needs noise insulation features included in the design.

CLEARLY UNACCEPTABLE:

New construction or development should generally not be undertaken.

Source: California City 2009.

City

California City General Plan Noise Element

The City of California City General Plan 2009–2028 includes the Noise Element of the General Plan (Chapter 7). The Noise Element identifies and assesses noise issues within the General Plan Planning Area. It provides goals, policies, and implementation measures. As stated within the Noise Element, the goals provide guidelines that respond to the identified noise issues, while the policies and implementation measures define strategies to reduce excessive noise levels and avoid land use conflicts in the Planning Area in order to limit community exposure to significant noise sources. Regulation of excessive noise is provided within noise standards that are considered in the planning process to minimize the potential for excessive noise exposure. Noise compatibility for land uses used by the City is based on standards developed by the State Department of Health Services Office of Noise Control, which are presented in Table 4.13-2 above.

The City of California City General Plan Noise Element includes interior and exterior noise standards for various land use categories. These are provided in Table 4.13-3 below.

TABLE 4.13-3 INTERIOR AND EXTERIOR NOISE STANDARDS

Land Use Categories		Noise Standards (dB CNEL)	
Category	Land Use	Interior ¹	Exterior ²
Residential	Single-Family Multi-Family	45 ³ –55 ⁴	65
	Mobile home		65⁵
	Hotel, motel, transient lodging	45	65 ⁶
Commercial/Industrial	Commercial, retail, bank, restaurant	55	
	Office building, professional office, research & development	50	
	Amphitheater, concert hall, auditorium, meeting hall	45	
	Gymnasium (multi-purpose)	50	
	Health clubs	55	
	Manufacturing, warehousing, wholesale, utilities	65	
	Movie theater	45	
Institutional	Hospital, school classroom	45	65
Institutional	Church, library	45	
Open Space	Parks		65

Notes:

- ¹ Interior environment excludes bathroom, toilets, closets, and corridors.
- Outdoor environment is limited to private yards of single-family units; multi-family residences' private patio or balcony which is accessed by means of exit from inside the unit; mobile home park; hospitals' patio; park picnic area; school playground; and hotel and motel recreation area.
- Noise level requirements with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided pursuant to Appendix Chapter 12 Section 1205 of UBC.
- 4 Nosie level requirement with open windows, if they are used to meet natural ventilation requirements.
- Exterior noise level shall be such that interior noise level will not exceed 45 dBA CNEL.
- Except those areas affected by aircraft noise.

Source: California City 2009

The Noise Element also states that proposed stationary noise sources shall not exceed the noise standards in Table 4.13-4 on lands designated for noise-sensitive uses, 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 the noise barriers or other property line noise mitigation measures.

TABLE 4.13-4
MAXIMUM ALLOWABLE NOISE EXPOSURE

	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)	
Hourly Leq, dB	55	50	
Maximum level, dB	75	70	
Leq: equivalent noise level; dB: decibel			
Source: California City 2009			

California City Noise Ordinance

Article 4—Noise and Vibration of the California City Code (County Code) contains the City's Noise Ordinance (Noise Ordinance). The Noise Ordinance prohibits unnecessary, excessive, and annoying sounds and vibration that would create a public nuisance. The California City Noise Ordinance also specifies exterior noise levels that cannot be exceeded at the receiving properties

for a specified time period. The general application of these standards is noise made from one property to another. The following Sections of the Municipal Code regulate the transmission of noise across property lines of various noise zones and land uses.

Sec. 5-1.404. - Designated Noise Zones.

The properties hereinafter described are assigned to the following noise zones:

Noise Zone I:	Single, double and multiple family residential properties located at a distance more than 600 feet from a major roadway.	
Noise Zone II:	Single, double and multiple family residential properties located at a distance equal to or less than 600 feet from a major roadway.	
Noise Zone III:	Commercial properties.	
Noise Zone IV:	ee Zone IV: Manufacturing or industrial properties.	
Source: California City Code Section 5-1.404		

Sec. 5-1.405. - Exterior Noise Standards.

(a) The following exterior noise standards apply to property with the designated noise zone:

TABLE 4.13-5
CALIFORNIA CITY EXTERIOR NOISE STANDARDS

Noise Zone	Type of Land Use	Time Interval	Allowable Exterior Noise Level (dBA)
I	Single, double or multiple family residential (R-1, R-2, R-3 and R-4)	10:00 PM to 7:00 AM 7:00 AM to 10:00 PM	45 dB(A) 50 dB(A)
II	Single, double or multiple family residential (R-1, R-2, R-3 and R-4)	10:00 PM to 7:00 AM 7:00 AM to 10:00 PM	50 dB(A) 55 dB(A)
III	Commercial (C-1, C-2, etc.)	10:00 PM to 7:00 AM 7:00 AM to 10:00 PM	60 dB(A) 65 dB(A)
IV	Industrial or manufacturing (M-1, M-2, etc., or 1-1, 1-2, etc.)	Anytime	70 dB(A)
dBA: A-weighted decibels			
Source: California City Code Section 5-1.405			

- (b) No person shall create noise, or allow the creation of noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on other property to exceed:
 - (1) The noise standard for a cumulative period of more than thirty minutes in any hour; or
 - (2) The noise standard plus 5 dB(A) for a cumulative period of more than fifteen minutes in any hour; or
 - (3) The noise standard plus 10 dB(A) for a cumulative period of more than five minutes in any hour; or
 - (4) The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
 - (5) The noise standard plus 20 dB(A) for any period of time.

- (c) If the ambient noise level exceeds any of the above five noise limit categories, the cumulative period applicable to the category shall be increased to reflect the noise level.
- (d) Each of the noise limits specified above shall be reduced by 5 dB (A) for impact or simple tone noises, or for noises consisting of speech or music.
- (e) If the measurement location is on a boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall apply.
- (f) If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, the measured noise level obtained while the source is in operation shall be compared directly to the allowable noise level standards as specified respective to the measurement location's designated land use and for the time of day the noise level is measured.

The reasonableness of temporarily discontinuing the noise generated by an intruding noise source shall be determined by the Health Officer, or by the Police Chief, for the purpose of establishing the existing ambient noise level at the measurement location.

There are no known designated Noise Zone I (noise-sensitive)¹ areas in the Project site vicinity. However, there are Zone II (residential) areas to the west and, at some distance, to the north.

The City-specified noise standards are listed in Table 4.13-4, California City Exterior Noise Standards. It should be noted that these standards do not apply to the assessment of land use compatibility for transportation noise.

Sec. 5-1.407. - Exemptions.

The following activities are exempt from this Article:

- (a) Activities conducted on public parks, public playgrounds and public or private school grounds including, but not limited to, school athletic and school entertainment events.
- (b) Occasional outdoor gatherings, public dances, shows and sporting and entertainment events, if the events are conducted pursuant to a permit or license issued by the City.
- (c) Mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of bell or alarm on building or motor vehicle shall terminate its operation within thirty (30) minutes of being activated.
- (d) Noise sources associated with or vibration created by construction, repair or remodeling of real property or during authorized seismic surveys under the following conditions:
 - (1) The activities occur between the hours of 6:00 a.m. and 8:00 p.m. between May 15 and September 15 of each year or between the hours of 7:00 a.m. and 8:00 p.m. during the remainder of the year.
 - (2) The activities do not take place on Sundays or federal holidays.

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Noise Zone I, Noise-Sensitive Area, is an area designated by the health officer for the purpose of ensuring exceptional quiet. These areas must be indicated by the display of conspicuous signs in at least 3 separate locations within 164 meters (0.1 mile) of the institution or facility.

- (3) The noise level created by such activities does not exceed 60 dB (A) plus the limits specific herein as measured on residential property; and
- (4) A vibration does not endanger the public health, welfare and safety.

California City Vibration Standards

Section 5-1.410 of the City Municipal Code, shown below, regulates the transmission of vibration across property lines.

Sec. 5-1.410. - Vibration Standards.

No person shall create, maintain or cause ground vibration perceptible without instruments at any point on adjoining property. The perception threshold shall be presumed to be more than five-hundredths (0.05) inches per second root mean square (RMS) vertical velocity.

4.13.2 EXISTING CONDITIONS

Existing Noise Environment

As previously described, while there are no applicable regulations or plans classifying prisons or detention facilities as sensitive noise receptors, these land uses are assumed to be noise sensitive in this EIR. There are no sensitive receptors on the Project site. The nearest off-site sensitive receptors are inmates living in the existing California City Correctional Center located to the west of the Project site. The nearest building of the existing California City Correctional Center is located approximately 250 feet west of the proposed Project.

The primary sources of noise at the Project site are from activities occurring at the existing California City Correctional Center (CCCC). 20 Mule Team Parkway is located approximately 2,300 feet to the north and vehicular traffic on that roadway does not present a substantial source of noise. Due to the undeveloped nature of the area, ambient noise levels are considered low and quiet.

WWTP improvements will occur proximate to existing residential uses located approximately 360 feet to the south along Nelson Drive. There is no existing land use development proximate to the WWTP to the north, west, and east. Ambient noise levels are considered low and quiet due to the low levels of development and lack of noise sources.

Utilities would be developed along local road rights-of-way and would, at certain locations, occur near existing residential uses. Noise levels along these roadways are dependent on the level of traffic. Due to the relatively low levels of traffic occurring within the Project area and along offsite utility routes, ambient noise levels are considered low.

4.13.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Noise if it would:

Threshold 4.13a:

Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Threshold 4.13b: Generation of excessive groundborne vibration or groundborne noise

levels?

Threshold 4.13c: For a project located within the vicinity of a private airstrip or an airport land

use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people

residing or working in the project area to excessive noise levels?

4.13.4 REGULATORY REQUIREMENTS

RR NOI-1

The Project will be constructed in accordance with Section 5-1.407 of the California City Municipal Code, which exempts construction noise from the City's noise standards if activities occur between 6:00 AM and 8:00 PM between May 15 and September 15 of each year and between 7:00 AM and 8:00 PM during the rest of the year. Construction activities shall not take place on Sundays or federal holidays. Also, the noise level from construction activities shall not exceed 60 dBA plus the limits specified in the Municipal Code, as measured on residential properties and vibration shall not endanger the public health, welfare and safety.

RR NOI-2

The Project will be constructed in accordance with Section 5-1.410 - Vibration Standards of the California City Municipal Code, which states that "No person shall create, maintain or cause ground vibration perceptible without instruments at any point on adjoining property. The perception threshold shall be presumed to be more than 0.05 inches per second RMS vertical velocity."

4.13.5 IMPACT ANALYSIS

Threshold 4.13a:

Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term Construction Impacts

Mobile and Stationary Equipment

This section evaluates temporary noise impacts from construction of the Project to receptors adjacent to or near the Project site. Noise generated by on-site activities is evaluated based on California City noise standards. Each construction stage has a different equipment mix depending on the work to be accomplished during that stage. Each stage also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels. The Leq of each stage is determined by combining the Leq contributions from each piece of equipment used in that stage. Typical heavy construction equipment would include bulldozers, excavators, dump trucks, front-end loaders, graders, and industrial/concrete saws. In typical construction projects (such as the proposed Project), demolition and grading activities generate the highest noise levels; demolition usually requires impact equipment such as hoerams or jackhammers and grading involves the largest equipment. Construction of the different Project components involves both demolition, grading, trenching and building construction. Construction activities associated with the Project would not require pile driving. Blasting may be required to fracture bedrock for removal. MM NOI-1 would require a blast plan be developed which will minimize noise and vibration associated with blasting.

Because of the effects of noise attenuation, the distance from the noise source to a receptor is a primary consideration in determining the noise level experienced at the receptor. Because different construction stages involve different pieces of equipment and may involve only localized portions of a site, each construction stage can result in different noise levels being generated depending on the relative distance to sensitive receptors. The distances and locations of sensitive receptors near the Project site are discussed below.

Construction of the proposed Project and the WWTP are anticipated to start in the first quarter of 2024 and end by end of 2026. The offsite utilities are expected to occur second quarter of 2022 and end by mid-2023. Construction would be limited to the hours of 7:00 AM to 7:00 PM daily and would not occur on Sundays or federal holidays. Therefore, the construction noise standards of the City, which are hours limits (RR NOI-1) would not be exceeded (Threshold 4.13a), and the construction hours would also not exceed the limits of the City noise ordinance.

Onsite Construction Equipment

Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the U.S. Environmental Protection Agency's (USEPA's) Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground-clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for public works projects and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Estimated noise levels attributable to the development of the proposed Project are shown in Table 4.13-6, and calculations are included in Appendix G. Because of the large area for which construction activities would occur, noise levels have been estimated from the center of the Project site to each of the Project boundaries. The noise levels shown in Table 4.13-6 represent the noise levels at the average distance that would occur if noise sensitive uses are located at the Project boundary. With the exception of the existing CCCC, there are no current developed noise sensitive land uses proximate to the Project site. Table 4.13-6 shows noise levels for construction equipment at the nearest land uses. Noise levels from average Project-related construction activities would range from 47 to 61 dBA Leq. Noise levels would be higher when construction equipment approach any of the Project site boundaries. As noted previously, while the areas adjacent to the Project site were subdivided roughly 50 or more years ago, with the exception of the CCCC, no structural or infrastructure improvements have been installed on the surrounding properties and no residential buildings exist or are planned for construction. If there are no land uses that would be developed and inhabited near the Project site boundaries during the construction phase, noise levels experienced at properties further from the Project site boundaries would be substantially less.

TABLE 4.13-6 CONSTRUCTION NOISE LEVELS FROM PROPOSED CORRECTIONAL FACILITIES AT PROJECT SITE BOUNDARIES

Noise Levels (Leq dBA)			
Northern Project Boundary	Eastern Project Boundary	Southern Project Boundary	Western Project Boundary
1,315 feet from construction	1,770 feet from construction	1,315 feet from construction	1,770 feet from construction
56	53	56	53
61	58	61	58
50	47	50	47
59	56	59	56
61	58	61	58
	80undary 1,315 feet from construction 56 61 50 59	Northern Project Boundary Eastern Project Boundary 1,315 feet from construction 1,770 feet from construction 56 53 61 58 50 47 59 56	Northern Project Boundary Eastern Project Boundary Southern Project Boundary 1,315 feet from construction 1,770 feet from construction 1,315 feet from construction 56 53 56 61 58 61 50 47 50 59 56 59

L_{eq} dBA: Average noise energy level; ft: feet

Source: USEPA 1971.

Facility improvements at the City's WWTP would generate noise from construction activities. Generalized noise levels attributable to the installation of the proposed WWTP facility improvements are shown in Table 4.13-7, and calculations are included in Appendix G. This Table also shows noise levels for construction equipment at the nearest land uses. Noise levels from general Project-related construction activities would range from 22 to 72 dBA $L_{\rm eq}$.

TABLE 4.13-7
CONSTRUCTION NOISE LEVELS FROM PROPOSED WASTEWATER
TREATMENT PLANT IMPROVEMENTS AT NEAREST NOISE-SENSITIVE USES

	Noise Levels (Leq dBA)			
	North - Residence	sidence East - Memorial Park South - Residence		West - Residence
Construction Phase	31,000 feet from construction	2,516 feet from construction	360 feet from construction	1,770 feet from construction
Ground Clearing/Demolition	28	50	67	53
Excavation	33	55	72	58
Foundation Construction	22	44	61	47
Building Construction	31	53	70	56
Paving and Site Cleanup	33	55	72	58

L_{eq} dBA: Average noise energy level; ft: feet

Source: USEPA 1971.

The development of utility lines for water, natural gas, and sewer will occur at numerous locations within the City. Construction activities for utilities would sometimes occur proximate to the property lines of noise sensitive uses. A worst-case analysis is presented with noise levels shown estimated at the property line of the nearest noise sensitive use to the utilities at a distance of 15 feet. Exposure to construction noise would be transient at any one individual location as construction activities progress in a linear manner along the utility corridor shown in the exhibits in Section 3.0, Project Description. It is estimated that construction activities for the installation of subsurface utility lines would occur at a rate of roughly 300 to 400 feet per day. Estimated noise levels attributable to the installation of proposed utility lines and ancillary improvements are shown in Table 4.13-8, and calculations are included in Appendix G. Noise exposure generated by installation of the proposed utility lines at a specific individual receptor location would be transient

as construction occurs in a linear manner. As such, construction noise exposure for utility lines would be relatively brief (weeks) at individual locations.

TABLE 4.13-8 CONSTRUCTION NOISE LEVELS FROM PROPOSED UTILITY LINE INSTALLATIONS AT NEAREST NOISE-SENSITIVE USES

	Noise Levels (Leq dBA) at the Nearest Residence
Construction Phase	15 feet from construction
Ground Clearing/ Pavement Demolition	94
Trench Excavation	98
Foundation/Bedding Construction	98
Utility/Pipe Installation	89
Backfill, Paving and/or Site Cleanup	94
L _{eq} dBA: Average noise energy level; ft: feet	
Source: USEPA 1971.	

Table 4.13-8 shows noise levels for construction equipment related to utility line installation at the nearest land uses. Noise levels from general Project-related construction activities would range from 65 to 95 dBA L_{eq} for the maximum noise levels. Noise levels would be substantially less when construction activities are located further away from noise sensitive land uses.

Truck trips are needed for delivery of construction equipment and materials. Noise generated from truck trips would be add to the ambient noise level generated by vehicle traffic. Noise increases associated with Project truck traffic would be minimal due to the small magnitude of traffic resulting from delivery of building materials. Preliminary Project design anticipates that excavation of materials would be balanced onsite at the proposed CFCC. The WWTP upgrades would result in approximately 80 truck trips per day related to the removal of excavated materials would occur over the excavation period. Traffic noise increases associated with these trips would be minimal and would occur during the least noise sensitive portions of the day.

Noise from construction activities on site may be audible above the existing ambient noise environment when construction activities occur proximate to noise sensitive uses. Due to the rural and unpopulated nature of the area, some of the Project components would be located away from noise sensitive uses. Construction activities would occur during the least noise-sensitive portions of the day as per Municipal Code Section 5-1.407(d). The magnitude of noise generated by construction activities is also typical of offroad equipment and is not expected to require the use of equipment that generate substantial levels of noise (pile drivers). Because the Project would occur during the least noise sensitive portions of the day and would not involve equipment that generate extremely high levels of noise, noise associated with Project-related construction would not result in significant impacts and no mitigation is required.

Long-Term Operational Impacts

On-Site Noise Levels

Onsite noise generation associated with the proposed correctional facility would occur from the use of mechanical equipment (e.g., HVAC units), public address systems, parking lot activities, and outdoor recreational activities. The Public Address (PA) systems will be primarily utilized during emergency situations requiring a mass response to a given incident. The majority of staff

communication within the proposed facilities will be conducted via handheld radios, landlines and/or local intercoms and armed staff will be generally limited to perimeter patrol. As such, noise generated by the PA systems will be infrequent. Recreational facilities include four recreation areas that would each include games courts, gymnasiums (with full and half basketball courts, restrooms, and storage/maintenance rooms), fixed exercise stations, and a running track/walkway around the perimeter. Two additional large, outdoor recreation areas (e.g., soccer fields and/or game areas) would be provided west of this outdoor area. Noise generated by these activities would be intermittent and would not result in high magnitudes of noise levels due to the lack of bleachers and crowd noise associated with an organized athletic event. Noise associated with intermittent use of parking lots and recreational facilities would be attenuated to by proposed cell housing which would act as sound barriers. The only current noise sensitive use is the existing California City Correctional Center (CCCC), which has the same types of activities which generate noise. The proposed Project is also located away from any existing non-correctional facility noise sensitive uses and the distance between the proposed Project would further attenuate noise levels at the nearest noise sensitive uses. There may be future residential uses located east of the proposed correctional facilities. Noise generated by the proposed facilities would also be attenuated by proposed buildings and the large distance (700+ feet) between the future residential uses and the noise sources for the proposed Project.

The proposed functional and reliability improvements at the WWTP would improve the facilities reliability and wastewater treatment capacity. Functional improvements include repairs to cracks in aeration basins, provision of solids thickener and sludge transfer pumps, repairs to clarifiers scrapers and weirs, and repair or replacement of tertiary filters. Noise generation associated with the functional improvements would generally occur due to existing equipment and wastewater treatment processes. One additional source of noise associated with the functional improvements is the development of a sludge pump station that would transfer sludge from the thickeners to the centrifuge. The noise generated by the proposed pump station would attenuate with the approximately 600 feet distances between the pump station and the property line of the nearest residential use located to the south. Reliability improvements include provision of grit removal, an upgrade to influent pumps, enclosure of centrifuge, return activated sludge (RAS) pump upgrades, rehabilitation of percolation ponds, electrical system upgrades, and providing a safer disinfection system. The RAS pumps would be located within an area that is below grade and walled that is located approximately 540 feet from residential uses. Noise generated by the RAS pumps would be attenuated by being below grade and by the intervening wall as well as the relatively large distance of this equipment from the nearest residential uses.

The WWTP is required to comply with the exterior noise limits identified in Municipal Code Section 5-1.405. - Exterior Noise Standards. Compliance with the City's exterior noise limits would ensure that project related noise levels associated with operational improvements at the WWTP continue to stay within the levels acceptable to the City and would result in less than significant noise impacts.

The proposed utility improvements for water, sewer, and natural gas lines will not generate noise during the operations phase with the exception of the addition of a 550 gallon per minute pump at the Phase 1 water tank. The Phase 1 Booster Pump Station is located within an existing structure with a concrete pad that is capable of accommodating the new pump; no grading or earthwork is anticipated for this pump installation. Noise associated with the new pump would be attenuated by the existing structure. The existing structure is located within an area that has no noise sensitive uses within 1,000 feet.

Project-Related Traffic Noise Levels

The Traffic Impact Study (Associated Transportation Engineers 2020) estimates that the Project would generate 1,216 Average Daily Trips (ADT) and 132 trips during the AM peak hour and 132 additional trips in the PM peak hour. These ADT would be added to existing and cumulative traffic growth along local roadways proximate to the proposed Project. In community noise assessments, a 3-dBA increase is considered "barely perceptible," and increases over 5 dBA are generally considered "readily perceptible" (Caltrans 2013). A 5 dBA increase was used as the threshold for determining perceptible changes in traffic noise levels. Table 4.13-9, Existing and Projected Traffic Noise Levels, depict the noise increase from the proposed Project. The corresponding increase in off-site traffic noise would range from 0.2 to 3.6 dBA for the analyzed roadway segments proximate to the Project site. Thus, the traffic noise increases are below the 5 dBA noise increase threshold and would also not be readily audible or substantial. The impact on traffic noise levels would be less than significant and no mitigation is required.

TABLE 4.13-9 EXISTING AND PROJECTED TRAFFIC NOISE LEVELS

		Existin	g Traffic	Future N	o Project	Future Wi	th Project	Project Noise Increase	Cumulative Plus Project Noise Increase
Roadways		ADT	dBA CNEL	ADT	dBA CNEL	ADT	dBA CNEL	dBA CNEL	dBA CNEL
California City Boulevard	s/o Proctor Boulevard	3,436	66.6	3,740	67.0	3,922	67.2	0.2	0.6
Calliornia City Boulevard	w/o Proctor Boulevard	8,541	72.3	9,280	72.6	10,253	73.1	0.4	0.8
	n/o Proctor Boulevard	2,457	66.9	2,670	67.2	3,825	68.8	1.6	1.9
20 Mule Team Parkway	e/o Randsburg Mojave Road	1,109	63.4	1,210	63.8	2,365	66.7	2.9	3.3
	e/o Virginia Boulevard	161	55.0	170	55.3	231	56.6	1.3	1.6
Virginia Boulevard	n/o Gordon Boulevard	960	61.1	960	61.1	2,176	64.6	3.6	3.6

ADT: average daily traffic volume; CNEL: Community Noise Equivalent Level

Note: Noise levels calculated from the FHWA's RD-77-108 Traffic Noise Prediction Model (Calculations can be found in Appendix G of this report).

Source: FHWA 1978.

Threshold 4.13b: Generation of excessive groundborne vibration or groundborne noise levels?

Short-Term Construction Impacts

Groundborne vibration generated by construction projects is usually highest during pile driving, soil compacting, jack-hammering, and demolition-related activities. Pile driving would not be required for construction of the proposed Project. However, blasting may be used to fracture bedrock for removal. Mitigation measure NOI-1 would require a blasting plan to ensure that vibration does not cause any cosmetic building damage to any nearby buildings. Next to demolition, grading activities have the greatest potential for vibration impacts as the largest and heaviest equipment would be used during this stage. Table 4.13-13, Vibration Levels During Construction, summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment at a distance of 25 feet.

TABLE 4.13-10
VIBRATIONS LEVELS DURING CONSTRUCTION

Equipment	ppv at 25 ft (in/sec)			
Vibratory roller	0.210			
Large bulldozer	0.089			
Caisson drilling	0.089			
Loaded trucks	0.076			
Jackhammer	0.035			
Small bulldozer	0.003			
ppv: peak particle velocity; in/sec: inch(es) per second; ft: feet				
Source: FTA 2018.				

As discussed previously, the City has established a vibration limit within Section 5-1.410. - Vibration Standards of five-hundredths (0.05) inches per second RMS vertical velocity. However, the Municipal Code has provided an exemption related to vibration generated by construction activities per Section 5-1.407(d) provided construction activities do not occur outside of 6:00 AM and 8:00 PM between May 15 and September 15 of each year or between the hours of 7:00 AM and 8:00 PM during the remainder of the year, or on Sundays or federal holidays and vibration does not endanger the public health, welfare and safety.

Though the City allows for construction generated vibration, the following vibration damage thresholds are provided to determine whether project related construction activities would result in vibration induced building damage. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds are shown in Table 4.13-11, Vibration Damage Threshold Criteria. The building damage threshold of 0.50 ppv would be used for prison structures and 0.30 ppv would be used for older residential structures.

TABLE 4.13-11 VIBRATION DAMAGE THRESHOLD CRITERIA

	Maximum ppv (in/sec)		
Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources	
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08	
Fragile buildings	0.20	0.10	
Historic and some old buildings	0.50	0.25	
Older residential structures	0.50	0.30	
New residential structures	1.00	0.50	
Modern industrial/commercial buildings	2.00	0.50	

ppv: peak particle velocity; in/sec: inch(es) per second.

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020.

The Caltrans vibration annoyance potential guideline thresholds are shown in Table 4.13-12. Based on the guidance in Table 4.13-12, the "strongly perceptible" vibration level of 0.9 ppv in/sec is considered as a threshold for a potentially significant vibration impact for human annoyance. Vibration induced annoyance is assessed at building structures, as opposed to the property line for the assessment of noise, because vibration is not readily perceptible in outdoor environments but can be more readily perceived within a building.

TABLE 4.13-12
VIBRATION ANNOYANCE CRITERIA

Average Human Response	ppv (in/sec)
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035
ppv: peak particle velocity; in/sec: inch(es) per secon Source: Caltrans 2013.	d

Demolition, grading, and construction for the proposed Project would not occur proximate to any existing building. The nearest buildings to the proposed Project are the existing CCCC buildings located approximately 240 feet to the west of the western Project site boundary. Table 4.13-13, Vibration Generated from Construction of the Proposed Correctional Facility, shows the vibration annoyance and building damage criteria from construction-generated vibration activities proposed at the Project site. Table 4.13-13 shows the ppv relative to uses proximate to the Project site.

TABLE 4.13-13 VIBRATION GENERATED FROM CONSTRUCTION OF THE PROPOSED CORRECTIONAL FACILITY

	Vibration Levels (ppv)						
	North - Residence	East - Residence	South - Residence	West - Existing California City Correctional Center			
Equipment	(ppv at 5,795 ft)	(ppv at 3,265 ft)	(ppv at 6,715 ft)	(ppv at 240 ft)			
Vibratory roller	0.00	0.00	0.00	0.01			
Large bulldozer	0.00	0.00	0.00	0.00			
Small bulldozer	0.00	0.00	0.00	0.00			
Jackhammer	0.00	0.00	0.00	0.00			
Loaded trucks	0.00	0.00	0.00	0.00			
Building Damage Criteria	0.30	0.30	0.30	0.50			
Vibration Annoyance Criteria	0.90	0.90	0.90	0.90			
Exceeds Criteria?	No	No	No	No			

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Note: Calculations can be found in Appendix G).

Source: Caltrans 2020

Construction activities associated with the reliability and functional improvements at the WWTP would generate vibration. Table 4.13-14, Vibration Generated from Construction of the Proposed WWTP improvements, shows the vibration damage criteria from construction-generated vibration activities proposed at the WWTP. Table 4.13-14 shows the ppv relative to uses proximate to the WWTP. As shown in this Table, vibration levels are below the building damage criteria. Consequently, no building damage is anticipated to occur from construction of WWTP improvements.

TABLE 4.13-14 VIBRATION GENERATED FROM CONSTRUCTION OF THE PROPOSED WASTEWATER TREATMENT FACILITY IMPROVEMENTS

	Vibration Levels (ppv)						
	North - Residence	East – Memorial Park	South - Residence	West - Residence			
Equipment	(ppv at 31,000 ft)	(ppv at 2,516 ft)	(ppv at 360 ft)	(ppv at 1,770 ft)			
Vibratory roller	0.00	0.00	0.00	0.00			
Large bulldozer	0.00	0.00	0.00	0.00			
Small bulldozer	0.00	0.00	0.00	0.00			
Jackhammer	0.00	0.00	0.00	0.00			
Loaded trucks	0.00	0.00	0.00	0.00			
Building Damage Criteria	0.30	0.30	0.30	0.30			
Vibration Annoyance Criteria	0.90	0.90	0.90	0.90			
Exceeds Criteria?	No	No	No	No			

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Note: Calculations can be found in Appendix G).

Source: Caltrans 2020

Proposed Utility Improvements

The installation of utility lines for water, natural gas, and sewer will occur at numerous locations within the City. Construction activities for utilities would sometimes occur proximate to the existing buildings within California City. A worst-case analysis is presented with noise levels shown estimated at the nearest residential building to the utility lines at a distance of approximately 40 feet. Table 4.13-15, Vibration Generated from Installation of the Proposed Utility Lines, shows the vibration building damage criteria from construction-generated vibration activities and along utility lines and the ppv relative to uses proximate to the utility line installation site. As shown in this Table, vibration levels are below the building damage criteria and would not result in building damage at the nearest buildings to construction activities for the proposed utilities lines.

TABLE 4.13-15 VIBRATION GENERATED FROM INSTALLATION OF THE PROPOSED UTILITY LINES

	Vibration Levels (ppv)
	Nearest Residential Uses
Equipment	(ppv @ 40 ft)
Vibratory roller	0.10
Large bulldozer	0.04
Small bulldozer	0.00
Jackhammer	0.02
Loaded trucks	0.04
Building Damage Criteria	0.30
Vibration Annoyance Criteria	0.90
Exceeds Criteria?	No
nny nagly partials valuative May maying my average ft for	1

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Note: Calculations can be found in Appendix G).

Source: Caltrans 2020

Because project related construction activities would occur within the hours of construction activities permitted under Municipal Code Section 5-1.407(d), the City allows for transient levels of vibration to occur during the least vibration sensitive portions of the day. The quantitative analyses of construction induced vibration demonstrated vibration levels would be below building damage criteria and would not result in building damage. As such, less than significant impacts related to construction related vibration would occur from development of the Project.

Long-Term Operational Impacts

Operation of the proposed Project would not include activities that generate meaningful levels of vibration. Significant vibration impacts are not anticipated and no mitigation is recommended.

Threshold 4.13c:

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport to the Project site is the California City Municipal Airport, which is located 8.6 miles to the west. This general aviation airport is owned by the City of California City (California City 2009). This airport has 69 based aircraft and an average of 68 aircraft operations per week (AirNav 2020). The Airport Land Use Compatibility Plan projects aircraft operations at this airport to increase to 39,440 operations per year, with 109 operations per day. The majority of these operations would be made by single-engine aircraft (93.6 percent); would occur during the daytime hours of 7:00 AM to 7:00 PM (98.0 percent); and would use Runway 24 (82.0 percent) (Kern County 2012). Because the 60 dBA CNEL noise contour for this Airport would be more than 8 miles from the Project site, the proposed Project staff, inmates, and visitors would not be exposed to excessive aircraft noise levels from the California City Municipal Airport.

The Edwards Air Force Base (EAFB) is a military aviation installation located approximately 10 miles south of the site (AirNav 2018a). A 20,000-square-mile area north of EAFB is designated as the Joint Services Restricted R-2508 Complex and includes the Project site and all of California City, as well as parts of Kern, Inyo, Mono, Los Angeles, San Bernardino, and Tulare counties.

The noise from military aircraft activities at the EAFB and nearby military facilities would not change with the Project. Since the site is located more than 10 miles from the runways at EAFB, Project exposure to aircraft noise from aircraft takeoffs and landings at EAFB would not be considered excessive. The site would also experience periodic infrequent overflights in the project area by aircraft from EAFB. However, the infrequency of aircraft flyovers and the large distance of the Project site from the EAFB runways would not result excessive noise exposure at the proposed CFCC.

The Boron Airstrip is located 17 miles to the southeast of the site. This private airstrip has 1 based aircraft and conducts 58 operations per month (AirNav 2018b). There is no published noise contour for Boron Airstrip; however, considering its distance from the Project site and the low number of based aircraft and aircraft operations at this airstrip, it is concluded that staff, inmates, and visitors would not be exposed to excessive noise levels from aircraft operations at Boron Airstrip. The impact would be less than significant; no mitigation is required.

4.13.6 CUMULATIVE IMPACTS

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, consistent with Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., related projects) used for this analysis are presented in Section 2.4, Cumulative Projects, of this EIR.

Construction Activities

Noise and vibration impacts during Project construction would be localized and would occur intermittently for varying time periods throughout the construction period. Short-term cumulative impacts related to ambient noise levels could occur if construction associated with the Project as well as surrounding current and future development were to occur simultaneously. Based on the data in Section 2.4 of this EIR that has been confirmed with City staff, no potentially cumulative projects would be located within a ½ mile radius of the Project site. Due to distance between these sites and the Project site, the Project would not contribute to cumulative noise levels and impacts would be less than significant.

Operational Activities

Operational cumulative noise impacts describe how much noise levels are anticipated to increase over existing conditions due to traffic associated with the development of the proposed Project and all other future traffic growth. The analysis of potential traffic-related noise impacts presented above was based on the Traffic Impact Study prepared for the proposed Project. The Future with Project Conditions scenario from the Traffic Impact Report includes cumulative traffic due to the combined effects of continuing development and ambient growth (Associated Transportation Engineers 2020). As discussed above, the change in traffic noise in the future conditions scenario would not be readily perceptible.

Stationary noise impacts are expected to be attenuated on a project by project basis in compliance with applicable City regulations. Since the Project would not generate significant operational impacts, it would not contribute to the cumulative long-term noise impacts in the Project area. Therefore, the cumulative operational impact would not be cumulatively considerable and no mitigation is required.

4.13.7 MITIGATION MEASURES

MM NOI-1

A blasting plan will be developed prior to blasting to ensure that any nearby structures are not exposed to levels of vibration that result in cosmetic building damage or excessive noise levels. Measures that would reduce noise levels include the use of blast mats or blankets and sizing the detonation to minimize excessive levels of vibration. The blasting plan shall be reviewed by the City Public Works Director or designee.

4.13.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

There would be less than significant impacts related to construction after the implementation of mitigation measure MM NOI-1. The operations phase would not result in noise or vibration impacts and consequently no mitigation measures are required.

4.13.9 REFERENCES

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4.14 POPULATION AND HOUSING

This section evaluates changes in population, housing, and employment that would occur with implementation of the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project). This section addresses the existing population, housing, and employment conditions in the City of California City (City), as well as estimated population growth and trends related to future housing and employment. The environmental effects of increased population, housing, and employment on factors such as traffic, air quality, and noise are addressed in their respective sections of this Environmental Impact Report (EIR). Information below is derived from California Department of Finance (DOF) estimates of population and housing as of January 1, 2020; California Employment Development Department (EDD) unemployment rates for April 2020; and the Kern Council of Governments' (Kern COG) 2018 Regional Transportation Plan growth forecasts.

4.14.1 RELEVANT PROGRAMS AND REGULATIONS

No federal, State, county or local programs or regulations are currently in place that relate to development of correctional facilities, and their impacts on population, housing, and employment.

4.14.2 EXISTING CONDITIONS

Population

Regional Population

Kern County (County) had a January 2020 population of 917,553 persons, of which 320,299 persons (or 34.90 percent) were in unincorporated areas and the rest in incorporated cities (DOF 2020). Table 4.14-1 presents recent trends in the County's population growth. Population growth rates have been less than 1.2 percent since 2010, with persons in group quarters, which includes prisons, jails, dormitories, convalescent homes, group homes (a residential facility that provides 24-hour care and supervision to children), and other similar facilities, decreasing and increasing through the years (making up 3.31 to 4.38 percent of the total County population between 2010 and 2020) (DOF 2020).

TABLE 4.14-1
KERN COUNTY POPULATION GROWTH 2010–2020

	Countywide Residents		Resid	Residence in Group Quarters		
Year	Total Residents	Annual Percentage Change	Residents in Group Quarters	Annual Percentage Change	Percent of Population	
2010	839,631	-	36,757	_	4.38%	
2011	845,564	0.71%	36,014	-2.02%	4.26%	
2012	853,807	0.97%	32,002	-11.14%	3.75%	
2013	863,724	1.16%	30,848	-3.61%	3.57%	
2014	871,803	0.94%	31,543	2.25%	3.62%	
2015	880,346	0.98%	33,041	4.75%	3.75%	
2016	886,153	0.66%	32,077	-2.92%	3.62%	
2017	896,101	1.12%	32,733	2.05%	3.66%	
2018	905,801	1.08%	32,882	0.46%	3.63%	
2019	908,405	0.29%	32,414	-1.42%	3.57%	
2020	917,553	1.01%	30,365	-6.32%	3.31%	
Source: DOF	2020.				•	

In 2020, the Greater Antelope Valley area, which includes the cities of Tehachapi, Ridgecrest, and California City in Kern County (southeastern portion of Kern County), the cities of Lancaster and Palmdale in Los Angeles County (northwestern portion of Los Angeles County), and adjacent unincorporated areas in both counties, was estimated to have a resident population of 543,686 persons, of which approximately 122,369 persons were in the Kern County portion (GAVEA 2020).

Local Population

The City had a January 2020 population of 14,161 persons. Of this total resident population, 2,179 persons (i.e., 15.39 percent) lived in group quarters. Table 4.14-2 presents recent trends in the City's population growth. As shown, the City's resident population has decreased in 2011, 2013, 2016, 2019 and 2020 but is slightly up from the 2010 population, and the number of persons in group quarters has shown the same swings except in 2019 when there was an increase compared to a decrease in total citywide residents (DOF 2020).

TABLE 4.14-2
CALIFORNIA CITY POPULATION GROWTH 2010–2020

	Citywide Residents		Resid	Residence in Group Quarters		
Year	Total Residents	Annual Percentage Change	Residents in Group Quarters	Annual Percentage Change	Percent of Population	
2010	14,120	_	2,614	_	18.51%	
2011	12,917	-8.52%	1,258	-51.87%	9.74%	
2012	13,598	5.27%	1,650	31.16%	12.13%	
2013	13,555	-0.32%	1,451	-12.06%	10.70%	
2014	13,614	0.44%	1,451	0.00%	10.66%	
2015	14,495	6.47%	2,193	51.14%	15.13%	
2016	14,307	-1.30%	1,921	-12.40%	13.43%	
2017	14,619	2.18%	2,157	12.29%	14.75%	
2018	14,875	1.75%	2,458	13.95%	16.52%	
2019	14,423	-3.04%	2,496	1.55%	17.31%	
2020	14,161	-1.82%	2,179	-12.70%	15.39%	
Source: DOF	2020.					

Group quarters include detention centers which, in California City, includes the CCCC. The CCCC had 2,070 inmates on March 31, 2020 (CDCR 2020).

Housing

Regional Housing

The County's 2020 housing stock consisted of 299,674 dwelling units. This includes 214,230 single-family detached units; 7,425 single-family attached units; 29,478 units in two- to four-unit developments; 25,481 units in developments with five units or more; and 23,060 mobile homes. Approximately 26,371 units (8.8 percent) are vacant and the average household size is 3.20 persons per household (DOF 2020).

The Greater Antelope Valley's 2020 housing stock consisted of 109,056 housing units with an average household size of 3.20 persons per household (GAVEA 2020).

Local Housing

There are no dwelling units on the site. The City's 2020 housing stock consists of 5,219 dwelling units. This includes 4,050 single-family detached units; 97 single-family attached units; 471 units in two to four-unit developments; 159 units in developments with 5 units or more; and 444 mobile homes. Approximately 1,032 units (19.8 percent) are vacant and the average household size is 2.86 persons per household (DOF 2020).

Employment

Regional Employment

According to the EDD, the County's labor force consisted of 377,700 persons in June 2020, of which 311,600 persons were employed and 66,100 persons were unemployed. This translates to a County-wide unemployment rate of 17.5 percent (EDD 2020).

In 2018, there were a total of 123,279 jobs in the Greater Antelope Valley area. Of this, approximately 34,562 jobs were in the Kern County portion of the Greater Antelope Valley area (GAVEA 2017). Table 4.14-3 shows the job growth in the Greater Antelope Valley from 2010 to 2018.

TABLE 4.14-3 EMPLOYMENT GROWTH 2010–2018

	Greater Antelope Valley		Kern County portion of	Greater Antelope Valley		
Year	Number of Jobs	Percent Increase	Number of Jobs	Percent Increase		
2010	95,381	_	22,992	-		
2011	97,817	2.55%	26,119	13.60%		
2012	99,669	1.89%	28,289	8.31%		
2013	96,452	-3.23%	27,594	-2.46%		
2014	105,695	9.58%	29,526	7.00%		
2015	110,228	4.29%	31,789	7.66%		
2016	114,243	3.34%	32,837	3.30%		
2017	118,941	4.11%	34,074	3.77%		
2018	123,279	3.65%	34,562	1.43%		
Source: GAVI	Source: GAVEA 2014a, 2016, 2017, 2018, 2019, 2020.					

Local Employment

The four largest employers (with more than 3,000 employees each) in the Antelope Valley include Edwards Air Force Base, China Lake Naval Weapons Center, the County of Los Angeles, and Lockheed-Martin. The CCCC is the largest employer in the City (California City 2015). Kern COG estimates that there were 318,000 jobs in the County in 2014, which is projected to grow to 433,000 jobs by 2035 and to 480,000 jobs by 2042 (Kern COG 2018).

According to the EDD, California City's labor force consisted of 4,900 persons in June 2020, of which 3,300 persons were employed and 1,500 persons were unemployed. This translates to the City's unemployment rate of 31.7 percent, which is more than 14 percent higher than the Countywide unemployment rate of 17.5 percent for the same time period (EDD 2020).

The Project site is undeveloped and there are no employees stationed at the site. The adjacent CCCC is estimated to have 620 employees. Other employers in the area include Edwards Air Force Base, Rio Tinto (Borax) Mine, and Mojave Air and Space Port (California City 2017).

Growth Projections

At the time of its approval in 2009, the City's General Plan estimated its 2010 population at 14,842 residents and projected a 2020 population of 18,451 residents. The General Plan anticipated growth of around 11.5 percent between 2010 and 2020. Based on correspondence with the City, as indicated in Section 2.4 in this Draft EIR, the City has indicated future growth at 0.84 percent annually.

Growth projections for individual cities and the County have been prepared by Kern COG as part of its regional planning efforts for the development of the 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Table 4.14-4 presents the growth projections for the County and the City.

TABLE 4.14-4 GROWTH PROJECTIONS

	Year				
	2010	2017	2030	2042	
Kern County					
Population	839,600	897,112	1,208,200	1,469,500	
Increase		57,512	311,088	261,300	
Households	254,610	266,963	381,600	443,700	
Increase		12,353	114,637	62,100	
California City					
Population	14,120	14,248	21,400	28,000	
Increase		128	7,152	6,600	
Households	4,102	4,213	6,300	8,400	
Increase		111	2,087	2,100	
Source: Kern COG 2018.					

4.14.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Population and Housing if it would:

Threshold 4.14a: Induce substantial unplanned population growth in an area, either directly

(for example, by proposing new homes and businesses) or indirectly

(for example, through extension of roads or other infrastructure).

Threshold 4.14b: Displace substantial numbers of existing people or housing, necessitating

the construction of replacement housing elsewhere.

4.14.4 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.14a: Would the project induce substantial unplanned population growth in

an area, either directly (for example, by proposed new homes and businesses) or indirectly (for example, through extension of roads or

other infrastructure)?

Short-Term On-Site and Off-Site Construction Impacts

Construction activities at the Project site would lead to the temporary presence of construction crews. It is estimated that an average of 96 persons would be working at the construction site for 21 months and as many as 238 persons during the peak 3-month period. These crews may come from the City, the Antelope Valley area, and/or other areas of the County or the surrounding regions, depending on selected contractors and skills and trades needed. Because construction jobs are in various and ever-changing locations, construction contractors will generally travel to where the jobs are located. Beneficial impacts on employment, although short-term, would occur in the City due to construction of the proposed Project.

Although construction activities would occur at the Project site for approximately 24 months during Phase 1 and 18 months for Phase 2, each phase of construction would require a specific skill set from workers who would be on-site for a much shorter duration (e.g., grading, building

construction, utility installation, interior finishing), and the short-term nature of the construction activity would not be of sufficient duration to encourage new residents to move into the City or the Project area. As such, construction activities are not expected to create a demand for housing due to the short-term nature of employment for each trade at the site and off-site infrastructure improvement areas.

Demand for goods and services (e.g., food, gasoline) by the construction crews would be limited, but would likely come from local businesses in the area. Therefore, it is possible that construction activities would have a positive increase on sales/revenue for existing local businesses. Project-related construction demands for goods and services would occur for approximately 42 months (3 ½ years) but this new demand is not expected to indirectly induce business formation or substantial population growth since demand will vary during each construction phase and will cease upon completion of construction activities. In summary, construction activities are not expected to induce population growth in the area, nor would construction activities permanently change population, housing, or employment in the City.

Long-Term On-Site Operational Impacts

Inmate-Related Population, Housing, and Employment

Long-term operation of the proposed Project would increase the number of persons living in group quarters in the City by as much as 3,024 persons (i.e., maximum inmate capacity). This population increase would be due to the housing of inmates at the Project site. This increase in the local population would represent a 21.4 percent increase in the City's 2020 population of 14,161 residents and would increase the City's population to 17,185 persons at full capacity of the Project.

The Project's inmate population would also be within the City's General Plan projections for a 2020 population of 18,451 residents (17,185 residents if the 3,024-inmate population is added to the 2020 population of 14,161 residents) and within the projected population increase of 0.84 percent annually. In addition, no exceedance of the Kern COG's population growth projections would occur (which is estimated at 21,400 residents in the City by 2030 and 28,000 residents by 2042).

While the Project would house inmates who would increase the local population, the proposed Project does not increase the housing stock of the City nor does it meet the City's future housing needs for 1,268 units, as provided in the Regional Housing Needs Allocation Plan.

The increase in the number of persons in group quarters in the City by 3,024 persons would have no direct effect on the local housing availability because the inmates would reside within the Project and would not create a new direct demand for housing.

The increase in the number of persons in group quarters in the City by 3,024 persons would have no direct effect on local labor force because they are incarcerated and not a part of the City's available workforce. This increase in the local resident population would also not directly lead to a demand for goods or services or to business growth in the surrounding area since the Project's inmates would not have access to goods and services in the community.

However, the visitors of these inmates may create a demand for goods or services in areas adjacent to the Project site and in the City and surrounding areas. Visitation hours at Project would be on weekdays, weekends and designated holidays generally between 8:30 AM and 3:00 PM. Increased weekend and holiday demands for local goods and services that would be generated by visitors would have beneficial economic impacts on area businesses but are not expected to be substantial enough to indirectly increase business ventures and employment and is not

expected to cause a substantial growth in population since the facility is expected to accommodate approximately 200 visitors each weekend, and approximately 50 visitors on the major holidays in which visitation is allowed. Existing commercial uses in the City and in the Antelope Valley would be able to meet the demand for goods and services from these visitors.

It is possible that, due to the long-term incarceration at the Project, the families of inmates may relocate to the City or the surrounding areas in order to be closer for the convenience of regular visitations. Should this occur, it would indirectly create demands for housing, goods and services, and public services in the surrounding area. While specific estimates of family relocations cannot be easily made, relocation data from existing correctional facilities operated by CoreCivic shows that one to two percent of inmate families generally relocate to the surrounding area. This translates to a potential for up to 61 families moving into the City and surrounding area to be near inmates at the Project. If these households have an average of 2.84 persons per household (average household size in the City in 2018), it would bring in 175 new residents to the City.

If these relocating households are realized than the demand for 61 housing units could be met by the 1,032 vacant housing units in the City as of January 2020 (DOF 2020). Future housing demand could also be met by future housing units that could be built on the City's vacant residential-zoned land (108,460 acres) that could accommodate as many as 36,406 dwelling units, as called out in its Housing Element (California City 2015). Thus, potential increases in population that may indirectly accompany the Project can be served by available vacant housing units or future housing development that has been accounted by the City in its General Plan. This would not be considered substantial housing growth over the City's 2020 housing stock of 5,219 dwelling units. Also, no exceedance of the City's household growth projections (estimated at 8,400 households by 2042) would occur. As such, the long-term presence of inmates at the proposed Project is not expected to induce substantial direct or indirect impacts on population growth.

As with the existing CCCC, upon release from the proposed CFCC, former inmates are anticipated to return to their previous neighborhoods and/or communities to rejoin their families. The likelihood that released inmates who had not previously been living in California City would relocate into the City or the surrounding area cannot be determined, as housing choice generally depends on many factors, such as employment opportunities, housing price, social networks, and other quality of life considerations. Inmates who have lived in the Project area before their incarceration and return to their home communities are not considered to be a relocated individual if they again chose to live in the same place. Inmates whose families relocated into the City and the surrounding area during their incarceration would also not be relocating if their families chose to remain in the area. Inmates who did not live in the Project area may relocate to the area upon release for any number of reasons, including their past incarceration at the Project. Any estimate of inmate relocation into California City and the surrounding area due to past detention at the Project would be highly speculative and no determination of impact significance can be made.

Employee-Related Population, Housing, and Employment

The number of new employees that may be generated by the long-term operation of the Project is difficult to determine and would be dependent on the employment hiring protocols by CoreCivic or the future facility operator. As stated in Section 3.0, Project Description, the Project would be staffed by approximately 500 to 600 full-time equivalent employees or a total of 1,000 to 1,200 individuals, depending on the operating scenario and the occupancy rate. Approximately 65 percent of the staff will be working during the morning shift (6:00 AM to 2:00 PM); with approximately 25 percent of staff during the afternoon shift (2:00 PM to 10:00 PM); and approximately 10 percent of staff during the evening shift (10:00 PM to 6:00 AM). Administrative and medical staff would work from 8:00 AM to 5:00 PM for seven days per week. This employment

would include security staff, civilian staff, teachers, counselors, maintenance personnel, physicians, registered nurses, registered nurse practitioners, and other employees.

The staffing of the Project would include residents of California City and the surrounding areas, individuals who would commute to the Project, or individuals who would relocate to the City of the surrounding areas. Based on relocation data from existing correctional facilities operated by CoreCivic, it is estimated that 10 to 15 percent of Project employees would relocate from other places into the City itself. Thus, as many as 180 employees of the Project could relocate to be near the Project and would create a maximum demand for 180 housing units, leading to an increase in the City's population by 517 persons (assuming an average household size of 2.84 persons per household, which is the City's average household size in 2018). The introduction of 517 new residents into the City would represent a 3.6 percent increase in the City's 2020 population of 14,161 persons.

As discussed above, long-term operation of the Project would increase the number of persons living in group quarters in the City by 3,024 persons (21.4 percent population increase) and with 517 new residents associated with the relocating employee households and 175 new residents from relocating inmate households would result in an approximately 17,964 new residents. The 3,716-person population increase in the City's 2020 population of 14,161 residents (or a 26.2 percent population growth in the City) would be within the City's projected 2030 population of 21,400 persons and 2042 population of 28,000 persons.

With an unemployment rate of 31.7 percent in the City and 17.5 percent in the County as of June 2020, new jobs at the Project could be filled by the available unemployed local labor force of 800 persons in the City and the unemployed labor force from other areas in Kern and Los Angeles Counties and surrounding region, based on individual eligibility for the vacant positions. Beneficial impacts on employment would occur in the City and the surrounding region.

The number of jobs available in the City would increase by 1,200 positions, which would be within the employment projections for Kern County of 115,000 new jobs between 2014 and 2035 and another 47,000 jobs by 2042. The Project would not result in substantial employment growth in the City beyond what Kern COG has projected to occur by 2035 and 2042. Thus, there would be no exceedance of Kern COG's population projections for the City for 2035 and 2042, and no substantial employment growth would occur with the Project.

As discussed above, there are 1,032 vacant housing units in the City as of January 2020 and a large amount of vacant residential land that may be developed with new housing. The addition of as many as 61 inmate households and 150 employee households would not substantially affect the availability of housing in the City. The increased demand for public services related to this population growth, and the impacts on these services are discussed in Section 4.16, Public Services and Recreation. Demands for utility services are discussed in Section 4.17, Utilities and Service Systems.

The demand for commercial goods and services from any new residents to the Project area is anticipated to be met by existing local commercial/retail businesses and/or the expansion of such businesses. This increased demand would be negligible when compared to the City's total population (which is served by the City's existing commercial base and other commercial uses in the surrounding area) and would not substantially increase employment opportunities that could result in substantial increases in population.

Short-term demand for building materials and long-term demand for supplies and services to the Project would be met by existing businesses in the County and the Antelope Valley. Unmet demands may present business opportunities for new employment, construction materials/home

improvement, maintenance, commercial service providers, and other non-residential developments. The increased demand would encourage new businesses and/or the expansion of existing businesses that address the needs of the Project and in turn, create additional jobs in the area and the region, resulting in indirect demands for housing, commercial goods and service, public services and utilities. This impact would be incremental and considered less than significant.

Long-Term Off-Site Operational Impacts

Operation and use of the off-site utility infrastructure and facility improvements would not include the addition of employees who would be stationed at these infrastructure alignments and facilities. Existing public facility employees are expected to perform the same operation and maintenance functions for these improvements. No growth inducement would occur and no mitigation is required.

Threshold 4.14b: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

There are no dwelling units, residents, employees, households, or inmates at the Project site or the areas proposed for the access road, utility infrastructure improvements, and public facility upgrades. The Project site is currently undeveloped. Thus, no people, housing or household displacement would occur with the Project. Although no housing units are proposed by the Project, group quarters for 3,024 inmates would be provided by the Project. No displacement impacts to the existing CCCC, located west of the site, would occur with the Project. Construction activities and operation of the Project and off-site infrastructure and facility improvements would not involve the demolition or alteration of existing housing units. No people or housing displacement impacts would occur with the Project; no mitigation is required.

4.14.5 CUMULATIVE IMPACTS

Increases in the population and employment base of the City are expected with the proposed Project, along with indirect increases in population and housing from relocating visitors and employees. Cumulative development projects in the area would also include an adjacent 550-bed corrections facility or a 2,200-bed detention center and future increases in population, housing, and employment in the City and adjacent areas. Future growth and development in the City and in the surrounding area would lead to the development of new homes; the creation of new jobs; and increases in the resident population of the City and the Project Area. Kern COG estimates that there could be as many as 1,208,200 persons and 381,600 households throughout the County by 3030 and as many as 1,469,500 residents and 443,700 households by 2042. This would include the growth projections for the City of 21,400 residents and 6,300 households by 2030 and 28,000 residents and 8,400 households by 2042 (Kern COG 2018).

The increase in population itself is not expected to be a significant cumulative adverse impact, as long as housing is available that can adequately accommodate the population and goods and services remain available to meet residents' needs. (The increase in the City's population is directly due to the 3,024 inmates of the Project and indirectly associated with relocating employees and inmate families of the Project who would choose to permanently reside in the City.) The cumulative increase in population in the City would be accompanied by a decrease in housing vacancy and/or an increase in housing stock, as projected by Kern COG. Also, large amounts of vacant residential land exist in the City that could be developed to accommodate the future demand for housing. Housing availability is expected to match demand, such that the rate

of housing development by private developers in the various cities and communities in the Project area will follow the increase in housing demand in the area.

While the Project would increase the inmate population at the parcel that would be occupied by these facilities, the increase in the population of the City in group quarters would not exceed population projections and would not directly affect housing projections. Increase in the number of jobs on the parcel would also net exceed employment projections and would result in beneficial impacts on the City's economic base. Also, the cumulative indirect demand for housing would be met by existing vacant units and the development of undeveloped residential land.

The cumulative demand for commercial goods and services from these facilities is expected to be met by existing businesses and new business ventures that serve the marketplace. This may include businesses in the City, the County, and adjacent areas. Public service demand by future residents due to employment and inmate family relocations is expected to be met by various public service providers in the City. This is discussed in Section 4.15, Public Services and Recreation, of this EIR. Cumulative impacts would be less than significant.

The Project and the proposed corrections facilities would not result in housing displacement. No significant cumulative adverse impacts related to housing displacement would occur. No employment displacement would occur with the proposed Project nor would it contribute to cumulative employment displacement.

Cumulative impacts related to population, housing, and employment would be less than significant and no mitigation is required.

4.14.6 MITIGATION MEASURES

No significant adverse impacts on population, housing, or employment have been identified; therefore, no mitigation is required.

4.14.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Direct, indirect and cumulative impacts on population, housing, and employment would be less than significant.

4.14.8 REFERENCES

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4.15 PUBLIC SERVICES AND RECREATION

This section of the Environmental Impact Report (EIR) for the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) describes existing public services in the Project area and addresses potential Project impacts related to the services listed below. Information provided in this section regarding these public services is based on consultation with various public service providers and the websites of the service providers (the service provider is noted in parenthesis):

- Fire protection (California City Fire Department [CCFD]);
- Hospital services (Tehachapi Valley Health Care District, Antelope Valley Health Care District, Ridgecrest Regional Hospital);
- Police protection (California City Police Department [CCPD]);
- School services (Mojave Unified School District [MUSD]);
- Parks (California City Department of Parks and Recreation and Kern County Department of Parks and Recreation); and
- Library services (Kern County Library).

4.15.1 RELEVANT PROGRAMS AND REGULATIONS

State

California Fire Code

The California Fire Code (*California Code of Regulations*, Title 24, Part 9) is designed to be adopted by reference into local ordinances. The purpose of the Fire Code is to ensure the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials, and devices and from conditions hazardous to life or property. It includes regulations for Group I-3 buildings, which includes detention centers, jails, and prisons. Requirements include annual employee training on fire suppression equipment; 24-hour staffing; release locks for emergency evacuations; sprinkler system requirements; flame-resistant furniture; fire alarm systems; and refuge area capacity standards.

City

California City Municipal Code

Title 4 of the City's Municipal Code sets the City's regulations related to public safety (i.e., fire prevention, traffic, and firearms) and Title 5 addresses public welfare, including public nuisance. Title 4, Chapter 1 of the City's Municipal Code adopts the California Fire Code by reference and provides additional City regulations for fire prevention as it relates to burning and fireworks. New construction, rehabilitation, alteration, and/or expansion are required to comply with the Fire Code, with the California City Fire Department having authority to inspect buildings and premises for compliance and to correct conditions that may cause fire or contribute to its spread. Title 8, Chapter 1 of the Municipal Code adopts the Uniform Building Code by reference and Title 8, Chapter 2 adopts the National Electrical Code by reference. Chapter 3 establishes Fire Zones in the City. The City indicated this refers to the Fire Hazard Severity Zone, as designated by the California Department of Forestry and Fire Protection (CalFire). As discussed in Section 4.9, Hazards and Hazardous Materials, the Project site and the City are identified to have a Moderate fire hazard (CalFire 2007).

California City General Plan

The California City General Plan contains basic principles for development that are coordinated with the provision of adequate infrastructure, public facilities, and public services. The Land Use Element of the General Plan includes a Government (Public Facilities) designation for government and quasi-government facilities (i.e., City Hall, fire stations, police stations, wastewater treatment plant, parks and schools). The majority of areas designated as Government are in the central core. The Open Space and Conservation Element includes an implementation measure that requires new development to provide sufficient water supply for fire flow. The Safety Element of the General Plan sets an overall goal to protect the community from fire hazards, including structural fires and wildland fires and has a policy to ensure new development does not create a burden on emergency response services; that sufficient fire protection and police protection services and fire flows are provided; that adequate street widths and clearances for emergency response are available; and that development meets code requirements for fire safety and fire suppression systems. It also encourages all new development to implement Community Policing Through Environmental Design techniques and standards that increase safety (California City 2009).

The Open Space and Conservation Element of the General Plan sets a parks and recreation standard of 2.5 acres of local parkland per 1,000 residents, consistent with the City's Land Division Code (California City 2009).

4.15.2 EXISTING CONDITIONS

Fire Protection and Emergency Medical Services

The California City Fire Department (CCFD) provides fire protection and emergency medical services in the City and the Kern County Fire Department and Department of Public Health Services provide fire protection and emergency medical services to the County, with mutual aid agreements between the City and the County. The addresses and distances from the site of fire stations that are located nearest the Project site are provided below in Table 4.15-1.

TABLE 4.15-1
FIRE STATIONS IN THE PROJECT AREA

Fire Station	Address	Distance from Project Site		
California City Fire Station 190	20890 Hacienda Boulevard California City, CA 93505	6.2 miles southwest		
County Station 14 - Mojave	1773-1999 Mojave-Barstow Highway Mojave, CA 93501	19.2 miles southwest		
County Station 17 - Boron	26965 Cote Street Boron, CA 93516	14.8 miles southeast		
County Station 75 - Randsburg	26804 Butte Avenue Ransburg, CA 93554	18.5 miles northeast		
Source: California City 2020b b, Kern County 2020				

The CCFD operates as an "all hazards fire department" by providing technical rescue, advanced life support medical care, basic hazardous materials response, fire investigation, fire inspection, fire prevention, and code enforcement services (California City 2020c). It also offers public education; fire hydrant maintenance; nuisance abatement; flood response; and aircraft crash and arson investigation (California City 2009). The CCFD has a staff of 15 persons, including a fire chief, 3 captains, 3 fire engineers, and 5 firefighters and 3 administrative staff (California City 2016b, 2018b). The CCFD operates a four-person type I engine company and cross staffs a type

III and type IV engine (California City 2020c). In addition, it has mutual and automatic aid agreements¹ with the Kern County Fire Department and Edwards Air Force Base Fire Department (California City 2020c).

CCFD response times to the central core is approximately 3 to 5 minutes, with response times to the northeastern section of the City at a maximum of 16 minutes depending on distance from the fire station. Sprinkler systems are required in areas where the response time is 8 minutes or more (California City 2009). The average response time for fires for the CCFD from 2014 to 2017 was 8 minutes and 3 seconds (California City 2018b).

The existing CCCC is located approximately 7.5 miles northeast from the Station 190 and has accounted for 138 calls for service in 2018 and 136 calls in 2019 (California City 2020a). The average call duration to the existing CCCC is approximately one hour. Approximate travel time from the fire station to the existing CCCC is approximately 13 to 15 minutes. However, due to security procedures, time of arrival to patient contact requires up to an additional 10 minutes. Average patient assessment time ranges from 15 to 20 minutes and then an additional 10 minutes to exit the facility. If helicopter transport is required for a critical patient, call duration increases to over two hours (California City 2020c). (California City 2018b).

Information provided by the City has indicated that is it the City's "general mandate to respond and arrive on-scene of all emergency medical calls within eight minutes or less in the main community area" (California City 2020a). Based on this criteria, the City has indicated that existing services levels for emergency response to the northeastern section of the City are inadequate and the City should have additional facilities and staffing for improved service to meet current needs.

Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. Rather, the Project area, including the site, is within the area designated as a Moderate Fire Hazard Severity Zone (CalFire 2007).

Hospital Services

There are several hospitals and medical facilities in and near California City that serve the medical needs of the area's residents, visitors, and employees. These include the following:

- Adventist Health Tehachapi Valley Hospital, located approximately 37 miles to the west of
 the proposed CFCC, is a 25-bed critical access hospital providing emergency, surgery,
 imaging (radiology), laboratory, physical therapy, and respiratory services at 1110
 Magellan Drive in Tehachapi. It also has three community care clinics in Tehachapi,
 Mojave and California City, which provide women's health care physicals, psychology,
 Episodic care, child health care, immunizations, and school/sports physicals, services.
 The hospitals and health care centers are operated by the Tehachapi Valley Health Care
 District² (Adventist Health 2019; Adventist Health 2020).
- Antelope Valley Hospital (AVH), located approximately 50 miles to the southwest of the proposed CFCC, is a 420-bed, non-profit, acute care, medical and surgical hospital located at 1600 West Avenue J in Lancaster. It is operated by the Antelope Valley Healthcare District (AVHD); is Antelope Valley's only full-service hospital; and has a

Mutual and automatic aid agreements allow for reciprocal services to be provided across jurisdictional boundaries in the event of a disaster or other crises.

The Local Health Care District Law authorizes the creation of special districts to build and operate health care facilities in under-served areas. There at 78 health care districts in California, which include the Tehachapi Valley Health Care District and the Antelope Valley Health Care District.

medical staff of 650 physicians; a total staff of 2,300 employees; and over 450 volunteers. The hospital facilities and services includes a 24-hour emergency department and 24-hour trauma center; cancer care; cardiology care; critical care; forensic unit; heart and vascular care; home health services; imaging (radiology); mental health services; surgical services including but not limited to general, gynecologic, ENT, neurologic, orthopedic, robotic, urologic, vascular, and outpatient; obstetrics including a neonatal intensive care unit; occupational and physical therapy; home health services; pediatrics; palliative care, physical/occupational therapy; stroke care; wound care center and a 24-hour pharmacy (AVH 2020).

• Ridgecrest Regional Hospital (RRH), located approximately 47 miles to the northeast of the proposed CFCC, is a full service, acute care, non-profit hospital at 1081 N. China Lake Boulevard in Ridgecrest. The hospital services and facilities includes 24-hour emergency services, cardiology, cardiopulmonary rehabilitation, family practice intensive care unit, obstetrics, pathology, perinatal services, pediatrics, pulmonary care, laboratory, radiology and imaging, sleep lab, transitional care and rehabilitation unit, and other medical and nursing services to the local community (RRH 2020).

Police Protection and Law Enforcement

The California City Police Department (CCPD) provides police protection and law enforcement services from their station, located at 21130 Hacienda Boulevard. The CCPD has 13 sworn officers and 6 non-sworn personnel and provides uniformed patrol, investigations, off-road search and rescue (D.I.R.T.), special enforcement, and animal control services (California City 2020b).

CCPD response times to the central core is approximately 3 to 5 minutes, with response times to the northeastern section of the City at 10 to 12 minutes depending on distance from the police station (California City 2009). CCPD indicated current response times to existing CCCC is approximately 5 to 10 minutes, depending on officer position.

In 2019, there were 83 violent crimes and 281 property crimes in the City (DOJ 2020). This translates to a crime rate of 25.8 violent and property crimes per 1,000 residents in 2019, when the City's resident population consisted of 14,120 persons (DOF 2020). In comparison for 2019, there were 60 violent crimes and 327 property crimes in nearby Tehachapi which translates to a 30.3 per 1,000 residents in 2019 with a population of 12,758 persons (DOJ 2020, DOF 2020).

School Services

The Mojave Unified School District (MUSD) provides school services in the Project area through six schools. The Robert P. Ulrich Elementary School, Hacienda Elementary School, California City Middle School and California City High School are located in California City, west of the site (MUSD 2020). Current enrollment at local schools are provided below in Table 4.15-2.

TABLE 4.15-2 SCHOOLS IN THE PROJECT AREA

School	Address	Grades	2019-2020 Enrollment
Robert P. Ulrich Elementary School	9124 Catalpa Avenue California City, CA 93505	K-2	491
Hacienda Elementary School	19950 Hacienda Boulevard California City, CA 93505	3-5	521
California City Middle School	9736 Redwood Boulevard California City, CA 93505	6-8	501
California City High School	8567 Raven Way California City, CA 93505	9-12	501
Source: MUSD 2018, CDE 2018a, b, c, d			

Recreational Facilities

The vast open space in the Project area offers formal and informal use by off- highway vehicle (OHV), especially on the weekends. In addition, the California City General Plan identifies local parks in the City to include:

- Central Park is a recreational complex located at the City's central core. It includes a
 community center, game courts, golf course, game fields, sports center, fountains, lake,
 swimming pool, playground, pavilions, picnic areas, restroom facilities and gardens over
 82.90 acres.
- Tierra Del Sol Golf Course is a championship golf course on 157.61 acres, located beside Central Park.
- Kiosk Park is a 3.34-acre reception/registration and information area for recreational vehicles at the intersection of Randsburg-Mojave Road and Twenty Mule Team Parkway.
- Borax Bill Park offers camp sites, a recreational vehicle parking, picnic areas, and restroom/shower facilities on 31.59 acres. This park is located southwest of Cal City MX Park, which is a private motocross park on 10.29 acres.
- Silver Saddle Ranch and Club is a private recreational area for recreational vehicles, camping, horse stables, lodge facilities, swimming pool, and trails at the northeastern section of the City. Galileo High and Park J are City-owned land located near the Silver Saddle Ranch and Club. These City-owned properties cover 187.3 acres but have not been improved or made available by the City for public use.
- Balsitis Park is a 15.01-acre park with barbecue pits, picnic tables, game courts, game field, pavilions, and restroom facilities. This park is located at the western end of the City's central core, southwest of the site.

The City also has three pocket parks and under a joint use agreement with the MUSD, Robert Ulrich Elementary School, Hacienda Elementary School, California City Middle School, and California City High School have gymnasiums and sports fields that are available to local residents. In addition, the California City Memorial Park has landscaped areas that offer views of the surrounding desert and mountains (California City 2009).

There are several County and State parks in the surrounding area, including Lake Isabella, Tehachapi Mountain Park, community parks/picnic areas, ballfields and golf courses (Kern County 2020); the Desert Tortoise Research Natural Area, Mojave National Preserve, Jawbone Station, and Randsburg Mining District (California City 2016a); and the Red Rock Canyon State

Park, Sequoia National Forest, and Grass Valley Wilderness Area (CDPR 2020, NPS 2020, BLM 2020).

In addition to parks and natural open space areas designated for recreational use, the City has an Equestrian Overlay Zone that has equestrian trails and allows equestrians on roadways if they do not block vehicle traffic. There are existing bikeways in the City's central core and proposed bikeways on various streets, including Twenty Mule Team Parkway. There are also OHV trails that connect the central core to the northeastern portion of the City, running east-west approximately 1.0 mile north of the site (California City 2009). However, there are no existing bikeways or trails near the site.

Library Services

The Kern County Library provides library services in the County through 24 libraries, 2 bookmobiles and an online eLibrary. It has branch libraries in California City, Mojave, and Boron. The California City Library is located at 9507 California City Boulevard, 6.0 miles southwest of the site (Kern County Library 2020).

4.15.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. The Project would result in a significant impact to Public Services if it would:

Threshold 4.15a:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- (i) Fire protection,
- (ii) Police protection,
- (iii) Schools,
- (iv) Parks, and/or
- (v) Other public facilities.

A project would result in a significant impact to Recreation if it would:

Threshold 4.15b: Increase the use of existing neighborhood and regional parks or other

recreational facilities such that substantial physical deterioration of the

facility would occur or be accelerated.

Threshold 4.15c: Include recreational facilities or require the construction or expansion of

recreational facilities which might have an adverse physical effect on the

environment.

4.15.4 PROJECT DESIGN FEATURES

- **PDF PS-1** The Project includes space to accommodate both indoor and outdoor recreational facilities for inmate use only, including gyms, recreational areas, and game courts.
- **PDF PS-2** The Project includes indoor space/rooms to accommodate education classes and programs and libraries that will be made available to the inmate population.
- PDF PS-3 The Project includes space for the provision of medical services to inmates, including emergency response, medical and mental health screening and other health and medical services.
- PDF PS-4 The Project includes a Memorandum of Understanding (MOU) with local law enforcement, fire and emergency medical services (EMS) and local hospitals and trauma centers.

4.15.5 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirements (RR):

The Project will be designed and constructed in accordance with the California City Fire Code (Municipal Code, Title 4, Chapter 1, Article 1) and the regulations of the California City Fire Department, which include standards for building construction that would reduce the creation of fire hazards and facilitate emergency response.

4.15.6 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.15a:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

- (i) fire protection?
- (v) other public facilities (medical)?

Short-Term On-Site and Off-Site Construction Impacts

The Project would lead to the construction of a correctional facility and the introduction of inmates and staff to the Project site, which would increase the demand for fire protection services at the Project site.

Construction activities at the site would create a potential demand for fire-protection services due to the presence of fire sources that could ignite flammable and combustible materials. Short-term construction activities have the potential to increase the risks associated with fires due to the presence of heavy construction equipment (including the use of flammable liquids) and the presence of combustion engines (which could result in leaks that create fire risks). As with all construction activities in California, the Applicant would be required to implement applicable requirements of Chapter 33 of the California Fire Code (Fire Safety During Construction and Demolition), which has been incorporated into the City Fire Code (RR PS-1). This chapter prescribes minimum safeguards to prevent fire and to provide reasonable safety to life and

property. Building plans would be reviewed and structures inspected by the CCFD and the City Public Works Department for compliance with applicable standards for ingress/egress access, fire flow, fire sprinkler systems, fire hydrants, driveway widths and turning radii, and other pertinent requirements. These standards specify site design and building material and construction methods that would reduce the demand for fire protection services and would facilitate emergency response and evacuation.

Also, construction-related activities, primarily from the hauling of large equipment and materials to and from the Project site, may temporarily increase traffic volumes and obstruct traffic circulation in the Project area, thereby potentially impacting CCFD response times. However, as discussed in Section 4.16, Transportation/Traffic, the addition of the anticipated level of construction traffic to existing traffic conditions in the area would not be expected to noticeably alter traffic patterns or cause congestion in the immediate area.

As discussed in Section 4.14, Population and Housing, skilled workers and construction crews that would fill the construction-related positions for the Project may come from the local community or from outside the Project area. However, they are not likely to relocate to the City or the surrounding area since the construction employment would be temporary and short-term for specific trades. Therefore, short-term impacts due to the presence of construction workers would not require additional fire protection services or facilities. Compliance with RR PS-1 would ensure less than significant short-term construction impacts related to fire protection and no mitigation is required.

Long-Term On-Site Operational Impacts

The Project involves the operation of new structures on the site, which may pose a fire hazard and create a demand for fire protection services. As required under RR PS-1, on-site structures and other improvements would be constructed in accordance with the City's Fire Code and other pertinent requirements regarding fire prevention and suppression measures, including construction materials; building access and evacuation routes; automatic fire sprinkler systems; site access/fire lanes; water availability; fire flows; and hydrants, among other requirements. While the State Fire Marshal has final reviewing authority, the CCFD would review and approve all building plans, and conduct inspections for compliance with fire safety regulations, which shall be completed prior to issuance of the certificate of occupancy.

Compliance with the City Fire Code would avoid the creation of structural fire hazards and would reduce potential demands for fire protection services. Also, the risk of brush fires would be reduced by the removal of brush vegetation and construction of structures and pavements on the Project site. While the proposed structures and the introduction of an inmate population and employees may lead to an increased risk of structural fires due to human errors and accidents and/or additional demand for emergency medical services, the Project would comply with applicable fire safety and fire suppression requirements, security measures and safety programs to reduce the potential fire incidents and accidents. These standards require that each facility have a plan for fire suppression that is developed with the local fire department and that includes, but is not limited to: (1) fire suppression pre-plan developed with the local fire department (2) regular fire prevention inspections for compliance with fire prevention and suppression standards; (4) an evacuation plan; and (5) a plan for the emergency housing of inmates in the case of fire. These plans and standards are included in a formal Facility Emergency Preparedness Plan which is a basic operational component for the proposed Project.

The Facility Emergency Preparedness Plan will also include procedures for the following: (1) fire suppression pre-plan; (2) escape, disturbances, and the taking of hostages; (3) civil disturbance; (4) natural disasters; (5) periodic testing of emergency equipment; and (6) storage, issue, and

use of weapons, ammunition, chemical agents, and related security devices. Implementation of the Facility Emergency Preparedness Plan would reduce the incidence of fire and the demand for fire protection services.

Medical care at the proposed correctional facility would be overseen by an in-house Medical Director who would provide general oversight of all medical and behavioral health care needs of the inmate population. The medical department is augmented by physicians, dentists, midlevel providers, and other ancillary staff. Facilities would be staffed with 24/7 nursing coverage. On call provider coverage would be available during nights and weekends. Therefore, in-house medical professionals would be able to address the immediate emergency response needs and routine medical and behavioral healthcare needs of the inmate population, in a clinical setting on-site. Medical and behavioral healthcare would be implemented through PDF PS-3 which identifies space for the provision of medical services to inmates within the proposed facility. Inmates requiring a higher level of medical or mental health care would be moved or relocated to another facility that would provide the needed services. For those inmates with more severe needs, 911 would be utilized for transportation to the nearest hospital or trauma center as ordered by the onsite/on call medical provider. Inmate transport to a hospital/trauma center would be dependent on patient need and facility capacity as coordinated with the hospital/trauma center The need and number of ambulance paramedic/EMT calls varies by location, and responders would be responsible for stabilizing the patient for transport as a follow up to the initial emergency medical care provided by correctional facility staff.

CCFD paramedics, as the local responders for 911, would coordinate the transport of inmates that require urgent treatment or a higher level of medical or mental health care at a nearby hospital or trauma center. Area hospitals, such as the Tehachapi Hospital, Ridgecrest Regional Hospital, and Antelope Valley Hospital provide emergency medical services in accordance with Section 1317 of the California Health and Safety Code, which states that emergency services and care shall be provided to any person requesting the services or care for a condition in which the person is in danger of loss of life or serious injury or illness at any health facility that maintains and operates an emergency department. Inmates would be taken to area hospitals for emergency medical services and/or treatment and would be provided with security by assigned Project personnel and, thus, would not pose public safety hazards. In addition, as part of project implementation in PDF PS-4, a Memorandum of Understanding (MOU) would be implemented with local law enforcement and fire/emergency services as well as area hospitals/trauma centers. Therefore, based on the provision of in-house medical support at the proposed Project to address the immediate emergency response needs, and the area hospitals/trauma centers, the demand for emergency medical services would be less than significant with implementation of PDF PS-3 and PDF PS-4.

The additional support from CCFD to respond to and help coordinate the transport of more severely injured or sick inmates to local hospitals or trauma centers will adversely affect the CCFD levels of service in the City. To mitigate the potential effects of the additional CCFD support, the proposed project will implement MM PS-1 that would ensure adequate resources to finance the Project's fair share contribution for additional staff and/or equipment needed to meet the City's demand for 911 response services. Such a fair share contribution could be through a Community Facilities District, a Funding Agreement between the applicant and the City or some other measure acceptable to the City.

MM PS-1 would reduce potential impacts to fire protection service to less than significant. With MM PS-1, fire protection service would maintain service ratios, response times, or other performance objectives in compliance with existing published/adopted City standards.

Operation of the Project would also be subject to inspections by the CCFD, the DOJ, the Board of the State and Community Corrections, the Kern County Department of Public Health, and/or the State Fire Marshall, depending on the specific operator of the Project. These inspections are expected to regularly review site conditions and operations and would serve to prevent the creation of fire hazards and other health safety hazards at the facility. Thus, no fire hazards that would generate a significant demand for fire protection services would be created by the Project.

The Project is anticipated to have up to 1,200 employees. It is also estimated that some Project employees living outside the Project area would choose to relocate from other places into the City. Approximately 180 employees and their households could potentially relocate into the area that would equate to a maximum demand for 180 housing units. In addition, some families of the inmates may choose to relocate to the Project area for ease of visitation. Approximately 61 inmate families are expected to relocate to the surrounding area, as discussed in Section 4.14, Population and Housing, of this EIR. Potential employee relocations and visitor/family member relocations are anticipated to be met by existing vacant dwelling units in the City and the surrounding area.

As indicated in Section 4.14, Population and Housing, the Project could result in indirect impacts related to population growth due to the provision of new employment opportunities and, potentially, visitors/families that relocate, but this would not result in substantial housing growth. Existing vacant housing stock exists and indirect impacts such as demand for fire protection services associated with this housing stock was evaluated at the time of construction of existing housing. Therefore, the Project would not result in significant indirect population impacts associated with the need for and the provision of new fire protection services.

Long-Term Off-Site Operational Impacts

Use and operation of the access road, infrastructure improvements and facility upgrades would not require fire protection or emergency medical services, since the infrastructure improvements would be at-grade or underground and no employees would be stationed along the utility alignments. Also, facility upgrades would comply with the existing Fire Code and pertinent regulations and no additional employees would be provided at the public facility sites. No impact would occur and no mitigation is required.

Threshold 4.15a:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

(ii) police protection?

Short-Term On-Site and Off-Site Construction Impacts

The Project would lead to the construction of new structures and site improvements, as well as the introduction of inmates and staff to the site, which could potentially increase the demand for police protection and law enforcement services at the Project site.

The presence of equipment and building materials during construction activities can provide opportunities for theft or vandalism. However, there would be no unusually valuable or out of the ordinary equipment or materials associated with construction of the Project that would be attractive for criminal activity. Additionally, it is anticipated that crime would be deterred at the Project site given the distance of the site to urban areas; the Project site's location near the CCCC

and proximity to public safety personnel; and the construction area would be contained inside security fencing which would be protected with nighttime and weekend on-site security. There would be less than significant construction-related impacts on police protection services and no mitigation is required.

Long-Term On-Site Operational Impacts

The Project could create a demand for law enforcement and police protection services on the site and in the surrounding area. Due to the nature of the Project, it would feature higher security levels than most developments, and would include security fencing, perimeter road, observation posts/towers, security lighting, and other building safety measures. It would also be operated by armed security personnel and in accordance with applicable regulations for the operation of the detention center or correctional facility. The Project would include security measures and safety programs for detention facilities to protect the public by safely keeping the inmates and reduce the need for services from the CCPD. Due to the type of land use, security levels at the Project site would be higher than typically provided at other institutional facilities and demand for police protection services would be handled by in-house staff. This would avoid the need for police protection and law enforcement services from the CCPD.

During several pre-application meetings with the California City Police Chief during 2018/2019, service or equipment impacts resulting from the Project were not identified. As indicated above, the Project could result in indirect impacts related to population growth due to the provision of new employment opportunities and, potentially, visitors/families that relocate, but this would not result in substantial housing growth and would, therefore, not result in significant indirect impacts associated with the need for and the provision of new police protection services. Existing vacant housing stock exists and indirect impacts such as demand for police protection services associated with this housing stock was evaluated at the time of construction of housing. Because the indirect population would be housed in existing residential land uses, the impact to police protection services would be considered less than significant. Therefore, the Project would result in a less than significant impact on law enforcement resources and operations.

Thus, implementation of the Project would not result in significant demands for CCPD services and facilities. With a less than significant impact on CCPD services, it is not expected that additional staffing and/or resources or an increase or exceedance in service ratios, response times, or other performance objectives would occur.

As discussed above, indirect impacts related to population growth due to the provision of new employment opportunities and relocating visitors/families would not result in demand for new housing and would therefore not result in significant indirect impacts associated with the provision of new police protection and law enforcement services in the City and the surrounding areas. There would be less than significant long-term impacts to police protection services and no mitigation is required.

Long-Term Off-Site Operational Impacts

Use and operation of the access road, infrastructure improvements, and facility upgrades would not require police protection services, since the infrastructure improvements would be at-grade or underground and no employees would be stationed along the utility alignments. Also, facility upgrades would be located in secured sites and no additional employees would be provided at these sites. No impact would occur and no mitigation is required.

Threshold 4.15a:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

(iii) schools?

Short-Term On-Site and Off-Site Construction Impacts

As discussed in Section 4.14, Population and Housing, it is not anticipated that construction workers would relocate from other areas to the City due to the short-term employment opportunities for specific trades. Therefore, the presence of construction workers would not directly or indirectly result in new demands for additional school or other educational facilities because the construction workers are not likely to relocate to areas near the Project site due to temporary employment. No impact would occur and no mitigation is required.

Long-Term On-Site Operational Impacts

The adult inmate population at the Project would not require school services from local school districts because the inmates would be confined to the site and education and training programs would be provided by on-site facilities and programs (PDF PS-2). There would be no opportunities for the inmates to utilize MUSD school facilities or services.

The Project does not include residential land uses and would not directly bring in school-age children to the City who would generate a demand for school services in the Project area. However, Project employees have the potential to indirectly generate a demand for schools if new residents are drawn to the area due to employment at the Project site. Also, inmate family households may relocate to the area and indirectly generate a demand for schools.

As discussed in Section 4.14, Population and Housing, family relocation into the Project area may occur with the Project but is anticipated to be minimal. Also, the Project is anticipated to be staffed by approximately 1,200 employees who could be currently residing in the area or who would potentially relocate into the area. Project employees that would relocate from other places into the City is estimated that 150 employee households, resulting in a demand for 150 housing units. In addition, approximately 61 inmate families are also expected to relocate to the City. The demand for housing from inmate families and employees potentially relocating into the area would be met by the 1,032 vacant housing units in the City as of January 2020 (DOF 2020).

Vacant residential units in the City and the surrounding area would have paid school mitigation fees in accordance with the School Facilities Act (Section 65970 of the *California Government Code*) during the initial construction of these homes/residences. As such, the demand for school services from these homes would have been paid by school mitigation fees paid at that time to reduce their impacts on school services. Any future housing that would also be built to meet the increased in demand for school services would also have to pay the applicable school mitigation fees. Thus, the Project could result in indirect impacts related to population growth and could create indirect impacts associated with increased demand for area schools or other educational facilities or services. However, these impacts would be less than significant and no mitigation is required.

Long-Term Off-Site Operational Impacts

Use and operation of the access road, infrastructure improvements and facility upgrades would not require school services, since no employees would be stationed along the utility alignments and public facility sites. No impact would occur and no mitigation is required.

Threshold 4.15a: Would the project result in substantial adverse physical impacts

associated with the provision of new or physically altered governmental facilities the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

(iv) parks?

Threshold 4.15c: Would the project include recreational facilities or require the

construction or expansion of recreational facilities which might have

an adverse physical effect on the environment?

Short-Term On-Site and Off-Site Construction Impacts

As set forth in PDF PS-1, the Project would provide recreational facilities on the Project site for the exclusive use by inmates. These would include gymnasiums, recreational buildings and outdoor recreation yards with sports field and/or game courts. The impacts of constructing these facilities are evaluated in other sections of this EIR. Notably, local and regional air quality impacts are addressed in Section 4.3, Air Quality; noise and vibration impacts are addressed in Section 4.13, Noise; and traffic impacts are addressed in 4.16, Transportation. As identified through the analysis presented in this EIR, construction of the Project would result in less than significant impacts for all environmental topics with implementation of the Project Design Features (PDFs), Regulatory Requirements (RRs), and Mitigation Measures (MMs) described herein and summarized in the Executive Summary of this document.

Long-Term On-Site Operational Impacts

The recreational needs of Project inmates would be met by on-site facilities (see PDF PS-1) and there would be no long-term demands for additional on-site parks or other recreational facilities. Thus, there would be no long-term impacts on parks and recreation. Impacts would be less than significant and no mitigation is required.

Long-Term Off-Site Operational Impacts

Use and operation of the access road, infrastructure improvements, and facility upgrades would not require parks or recreational facilities, since no employees would be stationed along the utility alignments and public facility sites. No impact would occur and no mitigation is required.

Threshold 4.15b:

Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Short-Term On-Site and Off-Site Construction Impacts

As discussed in Section 4.14, Population and Housing, it is not anticipated that construction workers would relocate from other areas to the City due to the short-term employment opportunities for specific trades. Therefore, the presence of construction workers would not directly or indirectly result in new demands for additional parks or recreational facilities because the construction workers are not likely to relocate to areas near the Project site due to temporary employment. No impact would occur and no mitigation is required.

Long-Term On-Site Operational Impacts

Project inmates would not increase in the use or demand for recreational facilities in the City or the surrounding area, as the inmates would not be allowed off-site. On-site recreational facilities would be provided for inmate use (PDF PS-1). However, Project employees and inmate family households have the potential to indirectly generate a demand for recreational facilities if they move to the City or the surrounding area.

The Project does not include residential land uses and would not therefore directly generate population growth that would result in additional demand for parks or recreational facilities in the Project area. However, Project employees have the potential to indirectly generate a demand for parks as employee households relocate to the area due to employment at the Project. Also, inmate family households relocating to the area would indirectly generate a demand for parks.

As discussed in Section 4.14, Population and Housing, approximately 180 Project employees and 61 inmate families are expected to relocate from other places into the City, which would generate a demand for 241 housing units. This demand would be met by the 1,032 vacant housing units in the City as of January 2020 (DOF 2020). Vacant residential units in the City and the surrounding area would have met the General Plan objective to maintain a parks and recreation standard of 2.5 acres of park land per 1,200 residents during the initial construction of these homes/residences. These housing developments are expected to have provided on-site common recreational facilities in multi-family developments or to have paid or will pay in lieu fees for parks and recreational facilities in accordance with the Section 9-3.403 of the City's Municipal Code. Thus, the Project's indirect demand for parks and recreational facilities would have been considered as part of past or future housing development proposals.

The Project could result in indirect impacts related to population growth and could create indirect impacts associated with increased demand for recreational facilities. However, these impacts would be less than significant and no mitigation is required.

Long-Term Off-Site Operational Impacts

As discussed above, the use and operation of the access road, infrastructure improvements, and facility upgrades would not require parks or recreational facilities, since no employees would be stationed along the utility alignments and public facility sites. No impact would occur and no mitigation is required.

Libraries

Threshold 4.15a:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

(v) other public facilities (libraries)?

Short-Term On-Site and Off-Site Construction Impacts

As discussed in Section 4.14, Population and Housing, it is not anticipated that construction workers would relocate from other areas to the City due to the short-term employment opportunities for specific trades. Therefore, the presence of construction workers would not directly or indirectly result in new demands for additional libraries because the construction workers are not likely to relocate to areas near the Project site due to temporary employment or to use local libraries due to their employment at the site. No impact would occur and no mitigation is required.

Long-Term On-Site and Off-Site Operational Impacts

Project inmates would not increase the use or demand for libraries in the City or the surrounding area, as the inmates would not be allowed off-site. As set forth in PDF PS-2, the inmate population would be served by the on-site library facilities that would be constructed as part of the Project. There would be no opportunities for the inmates to use public library facilities at off-site locations. Project employees are also likely to use the on-site library and are not likely to use the California City Library due to their employment at the site.

Increased demands for library service are primarily driven by increase in permanent population, which are associated with development of residential land uses only. The Project does not include residential land uses and would not therefore directly generate population growth that would result in additional demand for library services in the Project area. However, Project employees have the potential to indirectly generate a demand for library services, since it is estimated that 180 employee households would relocate to the area due to employment at the Project. Also, approximately 61 inmate family households would relocate to the area and indirectly generate a demand for library services if they move to the City or the surrounding area. This indirect housing demand would be met by the 1,032 vacant housing units in the City as of January 2020 (DOF 2020) and the development of new dwelling units on residential-zoned lands in the City. Library services serve the existing residential land uses. Since the indirect population would be housed in existing residential land uses, the impact would be considered less than significant. It should be noted that library services have changed over the past several years with a greater emphasis on incorporating electronic materials (e-materials). Use of e-materials facilitates the trend for accessing information online and reduces the need for physical facilities needed to serve the population. Library services to these developments would continue to be provided by the Kern County Library through the California City Library.

The use and operation of the access road, infrastructure improvements, and facility upgrades would not require library services since no employees would be stationed along the utility alignments and public facility sites.

The Project would not generate significant adverse impacts on library services. No mitigation is required.

4.15.7 CUMULATIVE IMPACTS

The study area for cumulative impacts to public services includes California City and Kern County, which encompasses the service areas of the CCFD, CCPD, Kern County Fire Department (KCFD), Kern County Sheriff's Department (KCSD), Tehachapi Valley Health Care District, Antelope Valley Health Care District, MUSD, California City Department of Parks and Recreation, Kern County Department of Parks and Recreation, and the Kern County Library.

The cumulative impacts associated with the development of the Project, along with the proposed correctional facility and future growth and development in the Project area, may require additional staffing, equipment, and facilities for the CCFD and CCPD, as well as the KCFD and KCSD, in order to maintain adequate levels of public services throughout the Project area. All future development projects in the City must comply with the City's Fire Code and those in the County with the County Fire Code to prevent the creation of fire hazards and to reduce the demands for fire protection services. Future development would also have to comply with pertinent City and County regulations related to public safety. As indicated above in the evaluation of Thresholds 4.15(a)(i) and 4.15(a)(ii), the Project's impacts on fire protection/EMS services would be less than significant with mitigation and impacts to law enforcement services would be less than significant. Therefore, the incremental contribution of the Project on CCFD, CCPD, KCFD and KCSD services would not result a cumulatively considerable impact to fire protection and law enforcement services. Increased demand for hospital services by the Project and cumulative projects is expected to be met by local hospitals in the area.

School services, parks/recreation, and library services are all driven primarily by permanent population growth. As discussed above and in Section 4.14, Population and Housing, of this EIR, the Project would not generate direct population growth and the new employment opportunities generated by the proposed Project would not directly create a need for new housing (due to the availability of vacant housing in the area) or associated public services in the area. Therefore, because the proposed Project would not significantly contribute to the demand for schools, parks/recreation, or library services, there would be no cumulative impacts to these public services with implementation of the Project and the proposed correction facility/detention center, in addition to future growth and development in the City and the surrounding areas.

Cumulative impacts on public services and recreation would be less than significant with compliance with existing regulations and payment of school impact fees. No mitigation is required.

4.15.8 MITIGATION MEASURES

MM PS-1

The Project Applicant shall ensure adequate resources to finance the Project's fair share contribution for additional staff and/or equipment needed to meet the City's demand for 911 response services so that fire protection personnel and equipment are maintained at such levels to maintain standard levels of service and response ratios. Such a fair share contribution could be through a Community Facilities District, a Funding Agreement between the applicant and the City or some other measure acceptable to the City. Such funding mechanism must be in place before the issuance of the Certificate of Occupancy.

4.15.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of MM PS-1, the Project would result in less than significant adverse impacts related to public services and recreation. No significant unavoidable or cumulative impacts would occur.

4.15.10 REFERENCES

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4.16 TRANSPORTATION AND TRAFFIC

Existing traffic conditions in the planning area and the potential traffic impacts of the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) are evaluated in the Traffic Impact Study (TIS) prepared by Associated Transportation Engineers (ATE) in August 2020. The findings of the TIS are summarized below, and the study is included in Appendix H of this Environmental Impact Report (EIR).

The methodology used in the TIS for the proposed Project was approved by the City of California City (City) following consultation and responds to the comments provided by the California Department of Transportation (Caltrans).

4.16.1 RELEVANT PROGRAMS AND REGULATIONS

A number of programs and regulations have been adopted by regional, County, and local agencies to promote the efficient transport of people or goods in the region. Those that have direct relevance to traffic and circulation issues for the Project are summarized below.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which creates a process to change the analysis of transportation impacts under the California Environmental Quality Act (CEQA). As specified under SB 743 and implemented under Section 15064.3 of the State CEQA Guidelines, the use of vehicle miles traveled (VMT) is the required metric to be used for identifying CEQA impacts and mitigation. The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Evaluating Transportation impacts including guidance for VMT analysis.

In addition, the CEQA Guidelines encourage public agencies to develop and publish thresholds of significance or use thresholds on a case-by-case basis. Neither agency, the County of Kern (County) nor the City, have adopted thresholds or methodology for evaluating VMT to date. (ATE 2020).

Regional/County

Regional Transportation Plan/Sustainable Communities Strategy

The 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) addresses the region's goal for increased mobility, accessibility, reliability, and efficiency of the transportation system and the need for livability, sustainability, and equity for the creation of a stronger economy, healthier environment, and safer quality of life.

The strategic investments in the RTP/SCS consider existing and new funding sources and call for fully funding alternative transportation modes, while emphasizing transportation demand and transportation system management approaches (by improving transit services, the bikeway network, opportunities for walking, and housing options). It includes transportation system improvements to transit facilities, highways, non-motorized transportation (i.e., bikeways and Green Streets), freight rail, aviation, major highways, and local streets and roads. These transportation projects are anticipated to increase the County's economic base and allow for reinvestment in a more efficient and cleaner transportation system.

Transportation projects under the unconstrained scenario in the 2018 RTP/SCS include the widening to four lanes of California City Boulevard, Twenty Mule Team Parkway, and North Gate Road.

Congestion Management Program

The Congestion Management Program (CMP) is a State-mandated program that was enacted in 1990 to address the impact of local growth on the regional transportation system. The 2018 RTP/SCS for the County includes a CMP Action Element that links transportation, land use, and air quality issues in the County and addresses the impact of local growth on the regional transportation system. The CMP Action Element requires monitoring of land use and roadway performance by individual jurisdictions and provides guidelines for conducting a Traffic Impact Analysis (TIA). The CMP sets the levels of service (LOS) standard at a minimum of LOS E, except where base year LOS is worse than E. The CMP highway system includes State Route (SR) 14, SR-58, and U.S. Highway (U.S.) 395.

Federal Transportation Improvement Program

The Federal Transportation Improvement Program (FTIP) pulls together a prioritized list of transportation projects for the County that would implement the RTP/SCS's policies, programs, and projects for improving the mobility, accessibility, reliability, and efficiency of the transportation system. The 2019 FTIP includes various transportation projects that would be implemented over a 5-year period: State highway improvements, local streets and road projects, aviation projects, mass transportation projects, and non-motorized projects.

Projects in the City that are listed in the 2019 FTIP include pavement surfacing on Mendiburu Road, chip sealing and safety improvements on California City Boulevard, pavement rehabilitation on Hacienda Boulevard and Randsburg-Mojave Road, and a visitor/information center at Borax Bill Park (Kern COG 20018b).

California City

General Plan

The California City General Plan includes a Circulation Element that discusses the existing and proposed transportation and circulation system to serve the needs of existing and future development. It includes an overall goal for the development of a balanced circulation system and includes polices for an arterial system that serves the major centers of activity; the safe and efficient movement of vehicular traffic and pedestrians within the City; and encourages the use of alternative transportation. Project consistency with the goals and policies of the Circulation Element are discussed in Section 4.11, *Land Use and Planning*, of this Draft EIR.

Municipal Code

Title 4, Chapter 2 of the City's Municipal Code establishes the City's traffic regulations. These regulations include the designation of truck routes and requirements for a moving permit for transporting a structure or portion of a structure more than 12 feet wide over or across a City street.

4.16.2 METHODOLOGY

Traffic Performance

The TIS evaluates the LOS during the weekday morning and afternoon peak hours at five intersections:

- California City Boulevard/Ransburg-Mojave Road
- Twenty Mule Team Parkway/Virginia Boulevard
- State Route 14 SB Ramps/California City Boulevard
- State Route 14 NB Ramps
- State Route 58/California City Boulevard

The intersections were selected based on their relation to the Project site and those likely to be used by vehicles coming to and from the Project.

Level of Service varies from LOS A (free flow) to LOS F (substantially reduced speeds and stoppages). Table 4.16-1 defines and describes the LOS for roadway intersections.

TABLE 4.16-1 LOS FOR ROADWAY INTERSECTIONS

LOS	Description
А	Low volumes; primarily flee flow operations. Density is low and vehicles can freely maneuver within traffic stream. Drivers can maintain their desired speeds with little or no delay.
В	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. Stopped delays are not bothersome and drivers are not subject to appreciable tension.
С	Stable operations, however the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail but adverse signal coordination or longer queues cause delays.
D	Approaching unstable traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and their selection of travel speeds. Comfort and convenience are low but tolerable.
E	Operations characterized by significant approach delays and average travel speeds of one-half to one-third of free flow speed. Flow is unstable and potential for stoppages of brief duration. High signal density, extensive queuing, or signal progression/timing are the typical causes of delay.
F	Forced flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion.

Trip Generation Estimate

The Project's potential vehicular trip generation was forecast based on project operational data as presented in Section 3.0, *Project Description*, including anticipated number of employees and shift changes. This information includes daily trip estimates on weekdays which assumes an estimated 600 employees daily at the Project site during 3 shifts over a typical 24-hour weekday period. The following represents the expected average daily operations that potentially could occur:

Inmate Transfer Trips: 4 trips per day (2 trips in, 2 trips out)

Delivery Trips:
 12 trips per day (6 trips in, 6 trips out)

• 600 Employees: 1200 employee trips per day (600 trips in, 600 trips out)

o 130 administrative/medical employees (8:00 AM to 5:00 PM)

390 other employees (6:00 AM to 2:00 PM)

150 other employees (2:00 PM to 10:00 PM)

o 60 other employees (10:00 PM to 6:00 AM)

It is anticipated that some delivery and employee trips are expected to occur during the typical peak one-hour commute period between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM peak hour periods. It should be noted that visitor trips would occur only on weekends which is outside of the AM and PM peak hour daily commuter periods.

Traffic Analysis

The Project's traffic impacts were analyzed under three scenarios for the weekday AM and PM peak hours:

- Existing Conditions
- Existing plus Project Conditions
- Cumulative plus Project Conditions

The Cumulative plus Project Conditions uses cumulative traffic volumes that were forecast for the study area intersections based on a growth factor of 0.84 percent per year for 10 years.

4.16.3 EXISTING CONDITIONS

Freeway and Roadway System

The circulation system in the City is comprised of regional highways, arterials, and collector streets. The following roadways provide primary access to the Project site.

State Route 14, located west of the Project site, is a major north-south freeway serving Los Angeles County and Kern County from Santa Clarita to Ridgecrest. SR 14 is four lanes wide and is the nearest freeway that provides regional access to the City and the Project site.

State Route 58, located south of the Project site, is an east-west highway serving Kern County from Bakersfield to Barstow. SR 58 is a four-lane highway through California City and provides regional access to California City and the Project site.

California City Boulevard, located west of the Project site, is an east-west arterial roadway south of Randsburg-Mojave Road. California City Boulevard extends east from SR-14 and then traverses south at Randsburg-Mojave Road to SR-58. California City Boulevard is signalized at Randsburg-Mojave Road.

Randsburg-Mojave Road, located west of the Project site, is a north-south arterial roadway, which extends north from California City Boulevard. Randsburg-Mojave Road is signalized at California City Boulevard.

20 Mule Team Parkway, located north of the Project site, is an east-west arterial roadway that extends east from Randsburg-Mojave Road.

Virginia Boulevard, is a two-lane local roadway and provides access to the Project site from 20 Mule Team Parkway.

Other roads nearest to the Project site that provide access include dirt roads that extend from Virginia Boulevard, which is the nearest paved roadway to the west of the site. Gordon Boulevard is an unpaved roadway extending west of Virginia Boulevard and Lindbergh Boulevard is an unpaved/unimproved roadway along the southern boundary of the site.

Intersection Analysis

The analysis of traffic impacts focuses on five intersections, which have been selected based on coordination with City staff and Caltrans comments. Two of these intersections are under Caltrans jurisdiction. These intersections are controlled by traffic signals, and the lane configurations of these intersections are shown in Exhibit 4.16-1, Existing Lane Geometries and Traffic Controls. Existing peak hour volumes were obtained for the five study area intersections from traffic count data collected by Associated Transportation Engineers in May 2017. Existing peak hour volumes are shown in Exhibit 4.16-2, Existing Traffic Volumes..

Using the Highway Capacity Manual (HCM) methodologies, as required by the City, which use intersection capacity, traffic volumes, and turning movements, the existing LOS operations at the study intersections are provided in Table 4.16-2. As shown, all intersections are operating at LOS A or B during the AM and PM peak hours.

TABLE 4.16-2
EXISTING LEVELS OF SERVICE

		Delay/LOS ^a	
Intersection	Control	AM Peak	PM Peak
California City Blvd/Randsburg-Mojave Rd	Signalized	0.0 Sec/LOS A	18.7 Sec/LOS B
20 Mule Team Pkwy/Virginia Blvd	STOP-sign	0.8 Sec/LOS A	7.3 Sec/LOS A
State Route 14 SB Ramps/California City Blvd	STOP-sign	1.5 Sec/LOS A	4.5 Sec/LOS A
State Route 14 NB Ramps/California City Blvd	STOP-sign	0.4 Sec/LOS A	0.0 Sec/LOS A
State Route 58/California City Blvd	STOP-sign	6.6 Sec/LOS A	1.2 Sec/LOS A

a LOS: level of service

Source: Associated Transportation Engineers 2020.

LOS based on average delay per vehicle in seconds pursuant to HCM procedures.

Source: Associated Transportation Engineers, August 2020

Existing Lane Geometries and Traffic Controls

Exhibit 4.16-1

Correctional Facility at California City (CFCC)



Map not to scale

(08/20/20 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\Ex_traffic_existing_lane.pdf

Source: Associated Transportation Engineers, August 2020

Existing Traffic Volumes

Exhibit 4.16-2

Correctional Facility at California City (CFCC)



Map not to scale

(08/20/20 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\Ex_traffic_existing_volumes.pdf

Alternative Transportation

Public Transit

Public transit services in the City are provided by Kern Transit through Route 250, which runs from the City of Lancaster to California City, operating 5 runs each day in both directions on Mondays through Fridays and three runs on Saturdays, with an additional 2 runs between California City and Mojave on Mondays through Fridays and 1 run on Saturdays. In addition, Route 230 runs from Mojave to Ridgecrest, passing through California City. This route has 3 runs in each direction on Mondays, Wednesday and Fridays, with one of these runs by the Eastern Sierra Transit Authority (ESTA) Route 395 (Kern Transit 2020). These bus routes do not pass near the Project site.

The City also has a California City Transit dial-a ride program that operates Monday through Friday from 8:30 AM to 4:30 PM, with no service on weekends or holidays (California City 2020). This transit service is limited to the City's central core.

Airport

The nearest public airport to the site is the California City Municipal Airport, which is located 8.6 miles west of the Project site. This general aviation airport is owned by the City and is open to the public. This airport has 69 based aircraft and an average of 68 aircraft operations per week (AirNav 2018a).

The Edwards Air Force Base (EAFB) is a military airport located 10 miles south of the site. This facility is operated by the U.S. Air Force and is not available for commercial or general aviation (AirNav 2018b). The Boron Airstrip is located 17 miles to the southeast of the site and the Mojave Spaceport is located 17 miles to the southwest.

Bicycle Lanes

The California City Bicycle Transportation Plan was adopted in 2008 and designates primary bicycle routes within the central core area of the City and an extended route on major streets. The bikeway system connects commercial areas, schools, recreational facilities, and major public facilities. There are no existing or proposed bikeways on Virginia Boulevard and along the site boundaries but bike lanes are proposed on Twenty Mule Team Parkway up to North Loop Road. At this point, bike lanes exist on Twenty Mule Team Parkway and continue westward onto California City Boulevard to Isabella Road. From Isabella Road to Yerba Boulevard, bike lanes are planned on California City Boulevard (California City 2009).

4.16.4 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. The Project would result in a significant adverse impact related to Transportation if it would:

Threshold 4.16a: Conflict with a program plan, ordinance or policy addressing the circulation

system, including transit, roadway, bicycle and pedestrian facilities.

Threshold 4.16b: Conflict or be inconsistent with CEQA Guidelines section 15064.3,

subdivision (b).

Threshold 4.16c: Substantially increase hazards due to a geometric design feature (e.g.,

sharp curves or dangerous intersections) or incompatible uses (e.g., farm

equipment).

Threshold 4.16d: Result in inadequate emergency access.

4.16.5 PROJECT DESIGN FEATURES

PDF TRA-1 The Project includes the construction of an access road that would extend east from Virginia Boulevard parallel to the Gordon Boulevard alignment to the northwestern corner of the site. The access road would have one inbound travel lane and one outbound travel lane.

4.16.6 REGULATORY REQUIREMENTS

RR TRA-1 The Project's construction activities will comply with City regulations and standards, including an encroachment permit for all work on public rights-of-way, inspections by the Department of Public Works; travel lanes on adjacent streets to remain open and unobstructed at all times; 48-hour notification of the California City Fire Department, California City Police Department, Mojave Unified School District, and transit agencies prior to partial or full street closures; and the provision

of the necessary traffic control devices to ensure traffic safety.

4.16.7 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.16a: Would the project conflict with a program plan, ordinance or policy

addressing the circulation system, including transit, roadway, bicycle

and pedestrian facilities?

Short-Term Construction Impacts

The Project would generate new vehicle trips from (1) equipment and construction worker travel and (2) trucks arriving and departing the Project site to deliver construction materials and remove debris generated by construction activities. Both the number of construction workers and trucks would vary throughout the construction phase in order to maintain a reasonable schedule of completion. The allowable hours of construction are between 6:00 AM and 8:00 PM daily between May 15 and September 15 and between 7:00 AM and 8:00 PM during the remainder of the year, except Sundays and federal holidays (per City regulations). In order to provide a more conservative (i.e., higher) forecast of potential hourly construction traffic trip generation, an 11-hour weekday workday was assumed. Thus, it is assumed that the majority of the workers will work within one shift starting by 7:00 AM and concluding by 6:00 PM (with some workers ending their workday before 4:00 PM).

The total construction period for Phase 1 of the Project is anticipated to extend for approximately 24 months, from August 2024 to the end of July 2026. Grading would occur from August 2024 to March 2025 while building construction would occur from October 2024 to July 2026. It is anticipated that construction workers would travel to the site in private vehicles and park on the Project site. However, if adequate parking areas are not available on-site, off-site parking would be required and shuttle/van service provided would transport the workers to and from the Project site during construction. Construction staging and materials storage areas would be provided on-site to accommodate construction equipment and delivery and storage of materials.

Proposed Correctional Facility

An average of 96 construction workers would be on the Project site during Phase 1 daily. Based on the location of the site and data provided by CoreCivic, it is anticipated that approximately 25 percent of the construction workers would carpool to the site. As shown in Table 4.16-3, construction of the CFCC would result in 85 AM peak hour trips and 85 PM peak hour trips and 274 average daily trips.

TABLE 4.16-3
PROJECT CONSTRUCTION TRIPS

Trip Type	ADT	AM Peak Hour Trips	PM Peak Hour Trips	
Construction Workers	144	72	72	
Construction Trucks	130	13	13	
Total	274	85	85	
Source: Associated Transportation Engineers 2020.				

Proposed Wastewater Treatment Plant Improvements

An average 10–15 construction workers would be at the wastewater treatment plant (WWTP) site during Phase 1 daily. As with the proposed Project, it is anticipated that approximately 25 percent of the construction workers would carpool to the site. As shown in Table 4.16-4, construction of the WWTP improvements would result in 18 AM peak hour trips and 8 PM peak hour trips and 100 average daily trips.

TABLE 4.16-4
WASTEWATER TREATMENT PLANT IMPROVEMENTS
CONSTRUCTION TRIPS

Trip Type	ADT	AM Peak Hour Trips	PM Peak Hour Trips	
Construction Workers	20	10	10	
Construction Trucks	80	8	8	
Total	100	18	18	
Source: Associated Transportation Engineers 2020.				

In general, it is anticipated that construction worker-related traffic would be largely freeway oriented. Construction workers would likely arrive and depart via nearby on- and off-ramps at the SR-14 Freeway and SR-58 Freeway. The most commonly used freeway ramps would be those nearest the Project site, including the SR-14 ramps at California City Boulevard and S-R 58 at California City Boulevard.

The traffic analysis below shows that no significant traffic impacts are expected with long-term operation of the proposed Project, which would generate 132 new weekday AM peak hour trips and 132 new weekday PM peak hour. Since the forecasted traffic generation during peak construction activities would be less than the trip generation during Project operations, the traffic impacts associated with construction activities are also determined to be less than significant.

In compliance with RR TRA-1, the traffic control signs and other traffic control devices, temporary lane closures, detours, designated truck haul routes, designated parking and staging areas, and/or construction traffic measures to minimize potential conflicts between construction activity and through traffic would be shown in a Construction Traffic Management Plan that is submitted to the City and the County.

Construction activities would be short-term and would not permanently affect the local circulation system and operational LOS. Impacts would be less than significant with compliance with RR TRA-1.

With respect to alternative modes of transportation, construction equipment, trucks and construction crews are unlikely to utilize alternative transportation due to the absence of public transit services to the Project site, the size of construction equipment and building material loads, and the need to bring tools and equipment to the site. However, due to the distance of the Project site to urban areas and residences, it is anticipated that 25 percent of the construction crew would carpool to the site.

Construction activities along the utility infrastructure corridor (Gordon Boulevard, 145th Street, Twenty Mule Team Parkway and California City Boulevard) and at the WWTP and Phase 1 BPS would not affect alternative transportation systems since no transit routes, bikeways, or trails are located along these roads or on these public facility sites. Construction of utility lines on Twenty Mule Team Parkway and California City Boulevard would also not affect the proposed bike lanes on these roads, since the utility infrastructure improvements are not expected to be constructed at the same time as future bike lane improvements on these roads. No impact on alternative transportation would occur in the short-term and no mitigation is required.

Long-Term Operational Impacts

Project implementation would generate new vehicle trips from employee and volunteer commutes, service/delivery vehicles, inmate transport buses, and visitor trips. These new vehicle trips would utilize local roadways and intersections in the Project vicinity, as well as SR-14, SR-58, U.S. 395, and other freeways in the region.

Trip Generation

Daily and AM and PM peak hour trip generation by the Project is provided in Table 4.16-5. Daily trip generation is estimated at 132 vehicle trips during the AM peak hour; 132 vehicle trips during the PM peak hour; and 1,216 average daily vehicle trips.

TABLE 4.16-5
PROJECT WEEKDAY TRIP GENERATION

Trip Type	Number	ADT	AM Peak Hour Trips	PM Peak Hour Trips	
Total Staff:	600	_	_	_	
Administrative/Medical Staff	130	260	130	130	
Other Staff	470	940	0	0	
Inmate Transfers	2	4	0	0	
Deliveries	6	12	2	2	
	Total	1,216	132	132	
Source: Associated Transportation Engineers 2020.					

This trip distribution is shown in Exhibit 4.16-3, Project Trip Distribution and Assignment. Project-related AM and PM peak hour traffic volumes are shown in Exhibit 4.16-4, Existing Plus Project Traffic Volumes.

It is anticipated that some of the Project employees would carpool to the Project site, which could result in a reduction in vehicle trips generated by the Project. However, this cannot be readily quantified and thus, is not considered in the analysis below.

Existing Plus Project Traffic Conditions

As shown in Table 4.16-6, all studied intersections are expected to remain operating at LOS A or B during the AM and PM peak hours. No exceedance of the City's LOS standard would occur. Thus, the increases in traffic volumes at the study intersections would not be considered a significant impact.

TABLE 4.16-6
EXISTING + PROJECT LEVELS OF SERVICE

	Delay/LOS ^a			
	AM Peak		PM I	Peak
Intersection	Existing	Existing + Project	Existing	Existing + Project
California City Blvd/Randsburg-Mojave Rd	16.6 Sec/LOS B	19.3 Sec/LOS B	18.7 Sec/LOS B	17.9 Sec/LOS B
20 Mule Team Pkwy/Virginia Blvd	0.8 Sec/LOS A	7.3 Sec/LOS A	0.6 Sec/LOS A	8.9 Sec/LOS A
State Route 14 SB Ramps/California City Blvd	1.5 Sec/LOS A	4.5 Sec/LOS A	1.8 Sec/LOS A	5.9 Sec/LOS A
State Route 14 NB Ramps/California City Blvd	0.4 Sec/LOS A	0.4 Sec/LOS A	0.0 Sec/LOS A	0.0 Sec/LOS A
State Route 58/California City Blvd	6.6 Sec/LOS A	7.4 Sec/LOS A	1.2 Sec/LOS A	1.5 Sec/LOS A

LOS based on average delay per vehicle in seconds pursuant to HCM procedures.

Source: Associated Transportation Engineers 2020.

Cumulative Plus Project Traffic Conditions

For the cumulative analysis, cumulative traffic volumes determined by using the existing volumes and applying a growth factor of 0.84 percent per year for 10 years. The growth factor was provided by the City.

As shown in Table 4.16-7, with the addition of Project-generated traffic, V/C ratios are expected to further increase, but intersections would remain operating at LOS A or B during the AM and PM peak hours with the exception of California City Boulevard/Randsburg-Mojave Road which would from a LOS B to a LOS C in the AM Peak Hour. A LOS C is considered within the City's acceptable standards for intersection operations. Changes in LOS would be less than significant, and no mitigation is required.

Exhibit 4.16-3

Correctional Facility at California City (CFCC)



Map not to scale

Existing Plus Project Traffic Volumes

Exhibit 4.16-4

Correctional Facility at California City (CFCC)



Map not to scale

(08/20/20 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\Ex_traffic_existing_project_volumes.pdf

TABLE 4.16-7 CUMULATIVE + PROJECT LEVELS OF SERVICE

	Delay/LOS ^a			
	AM Peak		PM I	Peak
Intersection	Cumulative	Cum. + Project	Cumulative	Cum. + Project
California City Blvd/Randsburg-Mojave Rd	18.7 Sec/LOS B	22.6 Sec/LOS B	19.1 Sec/LOS B	18.5 Sec/LOS B
20 Mule Team Pkwy/Virginia Blvd	1.0 Sec/LOS A	7.3 Sec/LOS A	0.7 Sec/LOS A	8.7 Sec/LOS A
State Route 14 SB Ramps/California City Blvd	1.6 Sec/LOS A	4.5 Sec/LOS A	1.8 Sec/LOS A	5.8 Sec/LOS A
State Route 14 NB Ramps/California City Blvd	0.5 Sec/LOS A	0.5 Sec/LOS A	0.1 Sec/LOS A	0.1 Sec/LOS A
State Route 58/California City Blvd	8.9 Sec/LOS A	10.3 Sec/LOS A	1.5 Sec/LOS A	1.9 Sec/LOS A

LOS based on average delay per vehicle in seconds pursuant to HCM procedures.

Source: Associated Transportation Engineers 2020.

Exhibit 4.16-5, Cumulative Traffic Volumes, provides the cumulative traffic volumes while Exhibit 4.16-6, Cumulative Plus Project Traffic Volumes, provides the cumulative plus project traffic volumes. Based on the City's impact threshold, the Project would not contribute to cumulative impacts at the study area intersections.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

As discussed in Section 4.11, *Land Use and Planning*, the proposed Project is consistent with the goals of the Kern County RTP/SCS. No FTIP projects, which implement the RTP/SCS, are specifically located adjacent to the Project site, and FTIP projects in the City and surrounding area would not be affected by the proposed Project. No impacts on the RTP/SCS are expected, and no mitigation is required.

Alternative Transportation

During long-term operations, an increase in the use of available alternative transportation may occur. While inmates will be transported to and from the Project in designated vehicles, employees and visitors of the Project may generate a demand for alternative transportation services. However, due to the distance to urban centers and the lack of bus, train or public transit services to and from the site, the potential use of alternative transportation systems would be limited to carpools, rideshare vans, and a limited use of motorcycles/bicycles.

Carpool/vanpool services would likely be utilized by employees on the same shift and would not require new or expanded transportation facilities. There are no existing or proposed bikeways near the site that may be utilized by employees or visitors. However, bicycle lanes exist on segments of Twenty Mule Team Parkway and California City Boulevard and future lanes are proposed. Where bicycle lanes don't exist, existing roadway shoulders in the area may be used by bicyclists coming to or going from the Project site Due to distance of the site to the City's population center, and the limited visiting hours at the proposed Project, bicyclists that may be generated by the Project are not expected to be substantial to require the construction of bicycle lanes. Also, the size of the Project, along with the adjacent California City Correctional Center (CCCC), is not large enough to justify the operation of transit services to serve the Project.

The additional water pump at the Phase 1 BPS and the proposed improvements at the WWTP would be located within these existing public facility sites and would not affect alternative transportation systems. Construction of utility lines on Twenty Mule Team Parkway and California City Boulevard are not expected to affect proposed bicycle lanes on these roads, since the utility

Source: Associated Transportation Engineers, August 2020

Cumulative Traffic Volumes

Exhibit 4.16-5

Correctional Facility at California City (CFCC)



Map not to scale

(08/20/20 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\Ex_traffic_cumulative_volumes.pdf

Source: Associated Transportation Engineers, August 2020

Cumulative Plus Project Traffic Volumes

Exhibit 4.16-6

Correctional Facility at California City (CFCC)



(08/20/20 MMD) R:\Projects\CRC\3CRC010100\Graphics\EIR\Ex_traffic_cumulative_project_volumes.pdf

lines would be placed underground and would not preclude future bicycle lane improvements. Utility lines on other roadways would also be underground and would not affect transit services, bikeways, or trails. No impact on alternative transportation would occur in the long-term and no mitigation is required.

Threshold 4.16b: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Short-Term and Long-Term Impacts

As previously indicated in Section 4.16.1, both the County and City were contacted regarding adopted VMT thresholds. Neither jurisdiction has adopted thresholds or methodology for evaluating VMT (ATE 2020). The OPR guidance for VMT analysis indicates that thresholds for developments in rural areas such as California City may best be determined on a case-by-case basis. In addition, OPR recognizes that mitigating VMT impacts for rural developments is a unique challenge. Caltrans guidance indicates that programming VMT mitigation may be the most effective in rural areas including at the General Plan level.

Given the rural nature and remote location of the Project site, the total regional VMT is expected to increase with the development of the Project. However, the Project VMT per employee is expected to be similar to the adjacent existing CCCC, and therefore, the Project VMT per employee is not expected to be higher than the area average. In addition, by providing local jobs, the proposed Project may assist the jobs/housing imbalance, reducing the distance and number of home to work and work to home commuter trips by City residents. While employees maybe reside in the City, it is anticipated that the majority of the employees are expected to reside in Palmdale, Lancaster, Ridgecrest and Tehachapi and will drive personal vehicles to work daily. While this matches the conditions of other development in the Project area, various strategies can be considered to reduce Project VMT. For example, the Project may elect to provide rideshare coordination services and/or incentives for carpooling. In addition, a local shuttle or vanpool option may be considered to provide a link to the Project site from existing transit stops in California City. Due to the nature of the Project, it is not recommended that transit service be provided directly to the Project site.

Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and the impact would be less than significant. No mitigation is required.

Threshold 4.16c: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Short-Term and Long-Term Impacts

No changes to the alignment of existing and future off-site roads are proposed by the Project. Also, no changes to the existing roadway network or traffic controls are proposed as part of the Project. In addition, no roads are proposed to be vacated. The Project also includes 55-foot wide road right-of-way dedications along the northern, and southern site boundaries and a 60-foot wide road right-of-way dedication along the eastern site boundary for future public streets. These setbacks would allow for the future construction of public roads adjacent to the site.

The proposed access road to the Project site would align along the south edge of the easterly extension of Gordon Boulevard to provide access to the site (PDF TRA-1). No sharp curves or dangerous intersections would be created by the proposed Project. The access road would provide full ingress and egress turning movements (i.e., right-turn and left-turn inbound and

outbound access) at Virginia Boulevard. Connectivity throughout the site will be provided via internal roads around each correctional facility, the retention basins, and the various parking/service-related areas (e.g., parking lots, building entrances, and loading areas) on the site.

The surface parking areas would provide approximately 2,105 parking spaces to accommodate the anticipated staff and visitor parking needs.

Off-Site Impacts

During the construction of the utility infrastructure improvements, traffic flows along Virginia Boulevard, Gordon Boulevard, 145th Street, Twenty Mule Team Parkway, California City Boulevard, and other local roads may be affected as road shoulders and adjacent travel lanes could be temporarily blocked to traffic. City standards would have to be followed for all construction work on public rights-of-way (RR TRA-1). The standards call for the provision of traffic control devices (e.g., warning signs/lights, temporary striping, driveway access, street closures, detours and barricades, flag persons, and other measures) to maintain public convenience and safety for motorists, cyclists, pedestrians, and construction workers.

Compliance with RR TRA-1 would minimize traffic obstruction during the construction phase and would prevent hazards to all persons near the construction zones. Impacts due to temporary construction activities on public roadways would be less than significant; no mitigation is required. Impacts related to traffic hazards would be less than significant and no mitigation is required.

Threshold 4.16d: Would the project result in inadequate emergency access?

Short-Term and Long-Term On-Site Impacts

The Project would be served by Virginia Boulevard, Twenty Mule Team Parkway, and other roads in the area and the City's roadway network that would provide emergency access. Several dirt roads are also available to serve as secondary evacuation routes from the site.

No changes to roadways are proposed by the Project, and the Project would be developed in accordance with current regulations, including emergency access for fire protection personnel. Compliance with the California Fire Code (see RR PS-1 from Section 4.15, *Public Services and Recreation*) would ensure the availability of adequate emergency access to the structures proposed on-site. Compliance with the Bureau of Prisons, California Department of Corrections and Rehabilitation (CDCR), and/or other applicable State and federal requirements for detention centers, correctional facilities, or other future facility uses (RR PS-2 in Section 4.15) regarding security procedures, fire protection, and evacuation and emergency management, would also facilitate emergency access and evacuation. No significant adverse impacts to emergency access would occur.

Off-Site Impacts

Major streets and freeways in and near the City would serve as evacuation routes. Virginia Boulevard, Twenty Mule Team Parkway, California City Boulevard, SR-14, S 58, and U.S. 395 would serve as evacuation routes for the Project. Twenty Mule Team Parkway, California City Boulevard, other major arterials, SR-14, SR-58, and U.S. 395 would also serve as evacuation routes for the City.

Construction of utility infrastructure extensions and connections on these and other roads could affect emergency access to abutting developments and hinder emergency evacuation during

major incidents. While construction on or near public rights-of-way may temporarily block traffic and access near the construction zone, the Project would comply with City regulations and standards (RR TRA-1) to maintain emergency access to individual parcels at all times, and emergency personnel would be notified of construction zones to facilitate emergency response to and through the construction area. Upon completion, the utility line extensions and connections would be underground and would have no impacts on emergency access. Impacts on traffic flows for emergency response and access or for evacuation would be temporary and less than significant; no mitigation is required.

4.16.8 CUMULATIVE IMPACTS

Cumulative transportation impacts are evaluated based on impacts to the roadway transportation network serving California City. The approved but not yet constructed 2,200-bed correctional center and future growth and development in the City and surrounding areas, as discussed in Section 2.4, Cumulative Development, together with the proposed Project, would add vehicle trips to roads, intersections, and freeways near the site and in the region. The TIA considers an ambient growth rate for the City and trips from the approved 2,200-bed correctional center in the analysis of Project impacts, as discussed above.

Short-Term Construction Impacts

The 2,200-bed correctional center proposed west/southwest of the Project site has no set construction timeline, and is not currently planned to be constructed at the same time as the proposed Project. Under a worst-case scenario that the Project and the previously approved correctional center are built concurrently, increases in construction traffic in the surrounding area would occur. Increased traffic volumes and Virginia Boulevard and Twenty Mule Team Parkway and other major roadways and intersections in the area would occur. These impacts would be temporary and would vary depending on the phase of construction at each site. Due to the relatively good levels of service (LOS A and B) at area roadways and intersections, these construction-related trips would not lead to LOS of D or worse service. Compliance with RR TRA-1 would avoid traffic congestion and safety hazards on the surrounding streets during construction. Impacts would be less than significant.

Long-Term Operational Impacts

The Cumulative Plus Project traffic analysis above accounts for a population growth factor of 0.84 percent over the next 10 years in the City. Therefore, the traffic analysis includes this increase in the assessment of cumulative traffic impacts from the proposed Project and future growth and development in the area.

The analysis shows that the Cumulative Plus Project traffic would result in no significant adverse impacts at the study intersections and freeway ramps. Therefore, no significant and unavoidable cumulative impacts would occur.

Based on regional traffic forecasts, Kern Council of Governments (Kern COG) has identified regional transportation improvements to meet the transportation and circulation needs of the region in its RTP/SCS and FTIP. Projects in California City that are listed in 2019 FTIP include chip sealing and safety improvements on California City Boulevard, pavement rehabilitation on Hacienda Boulevard and Randsburg-Mojave Road, and a visitor/information center at Borax Bill Park. These projects would not increase the capacity of the regional transportation network and would not affect roadways near the site.

Individual developments are expected to construct needed improvements to roads within and abutting each project site and/or pay fair share fees for impacts to nearby roadways and intersections. Compliance with City regulations by individual projects would prevent adverse impacts on alternative transportation systems; would avoid the creation of traffic hazards; and would not lead to inadequate emergency access. Cumulative impacts on transportation would be less than significant and no mitigation is required.

4.16.9 MITIGATION MEASURES

With implementation of PDF TRA-1 and compliance with existing City regulations (RR TRA-1), no significant adverse impacts related to traffic and transportation would occur. Therefore, no mitigation measures are required.

4.16.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Direct, indirect and cumulative impacts on traffic and transportation would be less than significant with compliance with existing regulations.

4.16.11 REFERENCES

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- California City, City of. 2020 (September 11, access date). Dial-A-Ride Service Hours/Fares. California City, CA: City of. https://www.californiacity-ca.gov/CC/index.php/transportation.
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4.17 TRIBAL CULTURAL RESOURCES

This section evaluates the potential impacts of the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) on tribal cultural resources. Information in this section is derived from the Phase I Cultural Resources Inventory for the Correctional Facility at California City (CFCC) prepared by Psomas in August 2020 and tribal consultations conducted by the City in compliance with Assembly Bill (AB) 52. The Phase I Cultural Resources Inventory is summarized in Section 4.5, Cultural Resources, with the complete report provided in Appendix D of this Environmental Impact Report (EIR).

4.17.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Native American Graves and Repatriation Act

The Native American Graves and Repatriation Act (NAGPRA) established a means for Native Americans, including Indian Tribes, to request the return of human remains and other sensitive cultural items held by federal agencies or federally assisted museums or institutions. NAGPRA also contains provisions regarding the intentional excavation and removal of, inadvertent discovery of, and illegal trafficking in Native American human remains and sensitive cultural items.

State

Senate Bill 18

Senate Bill (SB) 18 (*California Government Code*, Section 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any General Plan or Specific Plan proposed on or after March 1, 2005. There is no General Plan or Specific Plan amendment, or adoption required for this proposed Project; therefore, formal consultation under SB 18 is not necessary; however, informal scoping was undertaken with local tribes through project notification via informational letters.

Assembly Bill 52

Assembly Bill (AB) 52 requires that local agencies consult with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project and have requested such consultation. AB 52 allows Tribes 30 days after receiving notification to request consultation. The lead agency then has 30 days to initiate consultation after receiving a Tribe's request for consultation. Mitigation measures agreed upon during the consultation shall be recommended for inclusion in the environmental document. Impacts to tribal cultural resources are considered significant impacts to the environment. The AB 52 process must be completed prior to the release of the Draft EIR for the Project.

Discovery of Human Remains

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the Public Resources Code (PRC) states that, if the remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD shall complete his/her inspection and make a recommendation within 48 hours of being granted access to the site. The MLD's recommendation shall be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials. If the landowner rejects the MLD's recommendations, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code*, Section 5097.98).

4.17.2 EXISTING CONDITIONS

The prehistoric periods of California's southern desert region are discussed in Section 4.5, Cultural Resources, of this EIR and include:

- Pleistocene (10,000 B.C. 8000 B.C.)
- Early Holocene (8000 B.C. 6000 B.C.)
- Middle Holocene (7000 B.C. 3000 B.C.)
- Late Holocene (2000 B.C. Historic Contact)
- Late Prehistoric Complex (A.D. 1100–Historic Contact)

The Project area falls within the traditional territory of the Kitanemuk and Kawaiisu groups, south and southeast of the Gabrielino/Tongva, respectively, and west of the Southern Paiute. These boundaries are loosely defined due to the highly mobile nature of desert subsistence. Little is known about the ethnographic period in the western Mojave Desert region. Local groups continued to live in large, semi-permanent villages during the winter; and during the spring, summer, and fall would separate into smaller groups to hunt and gather the locally available resources including, among others, piñon nuts, mesquite, and yucca. Most of the ethnographic groups of the area shared similar cultural traits and practices and, for the most part, maintained friendly relations with each other.

Post-contact history for the state of California is generally divided into three periods: the Spanish period (1769 to 1822), Mexican period (1822 to 1848), and American period (1848 to present).

Native American Sacred Lands File Review

Review of the Sacred Lands File database at the NAHC did not identify the presence of scared lands on or near the Project site. As recommended by the NAHC, informal consultation with local tribes to obtain specific knowledge of the Project site was conducted. Letters were sent to the tribal groups and representatives on March 5, 2018, as listed in Table 4.17-1.

TABLE 4.17-1 NATIVE AMERICAN HERITAGE COMMISSION TRIBAL RESPRESENTATIVES CONTACT LIST

Tribal Organization	Ethnographic Affiliation	Contact(s)
Big Pine Paiute Tribe of the Owens Valley	Paiute-Shoshone	Genevieve Jones; Danelle Gutierrez
Kern Valley Indian Community	Tubatulabal; Kawaiisu	Robert Robinson; Julie Turner
Kitanemuk & Yowlumne Tejon Indians	Yowlumne; Kitanemuk	Delia Dominquez
San Manuel Band of Mission Indians	Serrano	Lee Clauss; Lynn Valbuena
Chumash Council of Bakersfield	Chumash	Julio Quair
Santa Rosa Indian Community of the Santa Rosa Rancheria	Tache; Tachi; Yokut	Rueben Barrios Sr.
Tejon Indian Tribe	Kitanemuk	Octavio Escobedo
Tubatulabals of Kern Valley	Tutatulabal	Robert L. Gomez, Jr.
Tule River Indian Tribe	Yokuts	Neil Pevron
Wuksache Indian Tribe/Eshom Valley Band	Foothill Yokuts; Mono; Wuksache	Kenneth Woodrow

Responses to the March 2018 letter were received from the tribal representative of the San Manuel Band of Mission Indians (SMBMI) by email on March 7, 2018. The SMBMI confirmed that the Project site lies outside of their traditional use area boundaries, and as such, will not be requesting consultation with the lead agency or requesting to participate in the scoping, development, and/or review of documents created pursuant to the legal and regulatory mandates.

Additionally, two of the tribes listed on the AB 52 contact list were contacted by the City pursuant to AB 52 requirements and were offered an opportunity to consult on the Project. The two tribes contacted are the Kern Valley Indian Council and the Tejon Indian Tribe. To date, neither tribe has requested AB 52 consultation. Therefore, the consultation period is complete.

4.17.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to Tribal Cultural Resources if it would:

Threshold 4.17a:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)

Threshold 4.17b:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of

the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:.

(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 21074 of the California Public Resources Code, which is part of the California Environmental Quality Act (CEQA), defines Tribal Cultural Resources are either of the following:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (a) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (b) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

4.17.4 REGULATORY REQUIREMENT

RR CUL-1 in Section 4.5, Cultural Resources, outlines the procedures to follow in the event of the discovery of human remains determined to be those of a Native American.

4.17.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.17a:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of

historical resources as defined in Public Resources Code Section 5020.1(k)?

Short-Term and Long-Term On-Site Construction and Operational Impacts

The Project site is undeveloped and no cultural resources were observed during the archaeological field survey of the site. Also, no structures or site improvements that may be considered tribal cultural resources would be disturbed or demolished by the proposed Project. The Project site is not listed in the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), or other local register as a historical resource. There are no sites on the NRHP, CRHR, or other local register near the Project site. No impacts to tribal cultural resources would occur on-site with the proposed Project.

Short-Term and Long-Term Off-Site Construction and Operational Impacts

The locations of the proposed access road, the utility corridor alignment along public roads, the City's Phase 1 booster pump station (BPS) and wastewater treatment plant (WWTP) are not considered tribal cultural resources or sites. No tribal cultural resources are known to be present on or near these public facility sites and infrastructure alignments. Also, there are no sites on the NRHP, CRHR, or other local register near these sites and alignments. Thus, no off-site impacts to tribal cultural resources are expected with the proposed Project.

Threshold 4.17b:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Short-Term On-Site Construction Impacts

There are no known tribal cultural resources on the Project site, the utility corridor alignment nor on public facility improvement sites. No archaeological resources were discovered on the Project site or utility corridor alignment during the archaeological field survey. However, several prehistoric archaeological sites were recorded on or near the Project area. Thus, there is a possibility that tribal cultural resources/materials or Native American human remains could be uncovered during grading and subsurface excavations for the construction of the proposed Project. MM CUL-1 in Section 4.5, Cultural Resources, calls for a qualified Archaeologist to monitor earth-moving activities during construction and sets procedures to follow in the event of the discovery of archaeological resources. RR CUL-1 in Section 4.5 summarizes regulations related to the disposition of human remains that are determined to be archaeological or historic in origin. Implementation of MM CUL-1 would reduce the potential for the destruction of any significant tribal cultural resources that may be discovered. Implementation of RR CUL-1 would allow for the proper reburial or disposition of Native American human remains. Impacts would be less than significant after mitigation.

Long-Term On-Site Operational Impacts

Operation of the Project and use of the off-site utility infrastructure and public facilities would not involve grading and excavation or any building alteration that may lead to the discovery or disturbance of tribal cultural resources. No long-term impact on tribal cultural resources would occur.

4.17.6 CUMULATIVE IMPACTS

Future growth and development in the City and surrounding unincorporated County area, including construction of the Project and the proposed correctional center(s) cumulative projects, would lead to ground disturbance, which may affect in-situ tribal cultural resources in the Project area. Due to the site-specific nature of tribal cultural resources, it is difficult to determine if significant cumulative impacts to tribal cultural resources would occur on individual development sites. Development on sites that were utilized by local tribes in the past has the potential to yield tribal cultural resources. The extent or significance of these resources cannot be determined until they are discovered during surveys or ground disturbance and subsequently evaluated.

Cultural resources site surveys that are conducted prior to development would allow the early identification of on-site tribal cultural resources and the preservation of significant resources. Compliance with Section 15064.5 of the State CEQA Guidelines to determine if there are important tribal cultural resources on individual development sites would prevent cumulative impacts on these resources. Also, implementation of project-specific mitigation as part of individual projects and cultural resource studies would avoid significant cumulative impacts.

Implementation of MM CUL-1 would reduce potential direct impacts to tribal cultural resources to less than significant levels and would reduce the Project's contribution to significant cumulative adverse impacts to less than significant levels. Compliance with RR CUL-1 by the Project and other proposed/planned developments, as it pertains to the disposition of human remains that are discovered during excavation or grading, would prevent significant impacts, and potential impacts on Native American human remains would not be cumulatively considerable.

Since the Project would implement MM CUL-1 and RR CUL-1 and other development projects would also need to consider and mitigate for any impacts to tribal cultural resources in compliance with applicable regulations, impacts would not be cumulatively considerable.

4.17.7 MITIGATION MEASURES

With implementation of MM CUL-1 and compliance with RR CUL-1, impacts to tribal cultural resources resulting from implementation of the proposed Project would be reduced to a less than significant level. No other mitigation is required.

4.17.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of MM CUL-1 and compliance with RR CUL-1 would prevent significant adverse impacts to tribal cultural resources resulting from implementation of the Project. No significant unavoidable direct, indirect, or cumulative impacts to tribal cultural resources would occur.

4.17.9 REFERENCES

Psomas. 2020 (August). Phase I Cultural Resources Inventory for the Correctional Facility at California City. Pasadena, CA: Psomas.

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4.18 UTILITIES AND SERVICE SYSTEMS

This section of the Environmental Impact Report (EIR) describes the existing utilities and service systems that would serve the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) site and surrounding areas and addresses potential Project impacts on the facilities and services of these utility providers. Information was derived from consultation with the various utility providers; the websites of utility providers, and the following technical reports that were prepared for Project:

- Appendix I-1: Correctional Development Facility at California City Project Water Supply Assessment (Psomas, dated November 2017)
- Appendix I-2: CoreCivic California City Correctional Facility Water Capacity Analysis (Psomas, dated June 2017)
- Appendix I-3: CoreCivic California City Correctional Facility Sewer Capacity Analysis (Psomas, dated August 2017)
- Appendix I-4: California City Wastewater Treatment Plan Technical Memorandum (Hazen & Sawyer), dated May 10, 2019)

4.18.1 RELEVANT PROGRAMS AND REGULATIONS

State

Water Supply

<u>Urban Water Management Planning Act</u>

The Urban Water Management Planning Act (UWMP Act) (*California Water Code*, Division 6, Part 2.6, Section 10610 et seq.) was enacted in 1983 and applies to municipal water suppliers that serve more than 3,000 customers or supply more than 3,000 acre-feet per year (afy) of water. The UWMP Act requires water suppliers to prepare and update their Urban Water Management Plans (UWMPs) every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, single-dry, and multiple-dry years. The UWMP Act specifies the data necessary to document the existing and projected future water demand over a twenty-year projection, and requires that the projected demands be presented in five-year increments for the twenty-year projection.

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (Assembly Bill [AB] 1881) requires cities and counties, including charter cities and charter counties, to adopt landscape water conservation ordinances by January 1, 2010. In accordance with this Act, the Department of Water Resources (DWR) prepared a Model Water Efficient Landscape Ordinance, as contained in the *California Code of Regulations* (Title 23, Division 2, Chapter 2.7). Cities and counties had the option to adopt DWR's ordinance or to develop their own.

Water Conservation Act of 2009

The Water Conservation Act of 2009 or Senate Bill 7 (SBX7-7) was approved in November 2009 and requires urban water retail suppliers in California to reduce per capita water use by at least 10 percent on or before December 31, 2015, and to achieve a 20 percent reduction by December 31, 2020. In their 2010 and subsequent UWMPs, urban retail water suppliers must include the baseline daily per capita water use, the urban water use target, the interim urban water

use target, and the compliance daily per capita water use, along with the basis for determining those estimates and references to the supporting data. Urban wholesale water suppliers must also include an assessment of present and proposed measures, programs, and policies needed to achieve the water use reductions required by this Act. While it does not require existing customers to undertake changes in product formulation, operations, or equipment that would reduce process water use, water suppliers may provide technical assistance and financial incentives to customers to implement efficiency measures for process water.

Urban retail water suppliers and agricultural water suppliers would not be eligible for State water grants or loans for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation unless they comply with the water conservation requirements established by this Act.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan, issued by the DWR in 2010 pursuant to SBX7-7, established a water conservation target of a 20 percent reduction in water use by 2020 compared to the 2005 baseline use.

Water Supply Assessments

Senate Bill (SB) 610 amended the *California Public Resources Code* and *California Water Code*, effective January 1, 2002, to improve the link between information on water supply availability and land use decisions. Under SB 610 (codified in the *California Water Code* beginning at Section 10910), cities or counties approving certain projects subject to the California Environmental Quality Act (CEQA) are required to identify any public water system that may supply water and request those water systems to prepare a water supply assessment (WSA). A WSA is required for any project that is subject to CEQA and that proposes one or more of the following:

- A residential development of more than 500 dwelling units.
- A shopping center or business establishment with either 1,000 employees or more than 500,000 square feet (sf) of floor space.
- A commercial office development with either 1,000 employees or more than 250,000 sf of floor space.
- A hotel or motel with more than 500 rooms.
- An industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor space.
- A mixed-use project that includes one or more of the requirements above.
- A project that would require water that is equal to or more than the water demand of 500 dwelling units.
- A project that is served by a public water system having fewer than 5,000 service connections; a proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections; or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by a residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

Since the Project would be located on more than 40 acres, a WSA is required under SB 610 and a determination needs to be made on whether the public water system that would serve the Project has available water supplies that will be sufficient to satisfy the demands of the Project, in addition to existing and planned future uses. SB 610 requires a WSA to include the following:

- A discussion of whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing.
- The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.
- A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts.
- A demonstration of water supply entitlements, water rights, or water service contracts by the following means:
 - a. Written contracts or other proof of entitlement to an identified water supply.
 - b. Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
 - c. Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.
 - d. Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.
- The identification of other public water systems or water service contract holders that
 receive a water supply or have existing water supply entitlements, water rights, or water
 service contracts, to the same source of water as the public water system.
- If groundwater is included for the supply for a proposed project, the following additional information is required:
 - a. Review of any information contained in the Urban Water Management Plan (UWMP relevant to the identified water supply for the proposed project.
 - b. Description of any groundwater basin(s) from which the proposed project will be supplied. Adjudicated basins must have a copy of the court order or decree adopted and a description of the amount of groundwater the public water system has the legal right to pump. For non-adjudicated basins, information on whether the DWR has identified the basin as over-drafted or has projected that the basin will become over-drafted if present management conditions continue, in the most current bulletin of DWR that characterizes the condition of the basin, and a detailed description of the efforts being undertaken in the basin to eliminate the long-term overdraft condition.
 - c. Description and analysis of the amount and location of groundwater pumped by the public water system for the past five years from any groundwater basin which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
 - d. Description and analysis of the amount and location of groundwater projected to be pumped by the public water system from any groundwater basin by which the

- proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
- e. Analysis of the sufficiency of the groundwater from the basin(s) from which the proposed project will be supplied.

In summary, a WSA must include an evaluation of the sufficiency of the water supplies available to the water supplier to meet existing and anticipated future demands (including the demand associated with the project) over a 20-year horizon that includes normal, single-dry, and multiple-dry years. SB 610 also identifies information that should be included in the UWMP if groundwater is identified as a source of water, such as a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the UWMP is submitted to the State.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act or SB 1262 was adopted in September 2016 and amends Section 66473.7 of the *California Government Code* to require all groundwater basins designated as high- or medium-priority basins by the DWR that are designated as basins subject to critical conditions of overdraft to be managed under a groundwater sustainability plan or coordinated groundwater sustainability plans by January 31, 2020, and requires all other groundwater basins designated as high- or medium-priority basins to be managed under a groundwater sustainability plan or coordinated groundwater sustainability plans by January 31, 2022. The Act authorizes the State Water Resources Control Board (SWRCB) to designate a basin as a probationary basin if the SWRCB makes a certain determination and to develop an interim plan for the probationary basin. The Act also require WSAs to address certain elements regarding groundwater sustainability if the project relies in whole or in part on groundwater as a source of supply.

The Fremont Valley Groundwater Basin (which underlies California City) has been designated by the DWR as a low-priority basin, pursuant to Section 10722.4 of the Water Code. As such, for the Project, the portions of SB 1262 that are applicable are as follows:

If a proposed development project will obtain water from a basin that is designated as low- or very low-priority under the Sustainable Groundwater Management Act of 2014 (SGMA), the following must be included in the WSA:

• Information as to whether DWR has identified the basin as being overdrafted or projected that the basin will become overdrafted if present management conditions continue.

DWR has not identified the Fremont Valley Groundwater Basin as being overdrafted or that will become overdrafted if present management conditions continue.

Propositions

Through California voters' approval, State funding has been made available to increase the reliability of State water supplies. In March 2000, California voters approved Proposition 13, which authorized the State to issue \$1.97 billion of its general obligation bonds for water projects. Additionally, California voters approved Proposition 50 in November 2002 and Proposition 84 in November 2006, which authorized State issuance of \$3.4 billion and \$5.4 billion, respectively, of its general obligation bonds for water projects. In November 2014, voters overwhelmingly approved Proposition 1, which authorized \$7.5 billion in bonds to provide a significant infusion of funding for water projects and programs. The types of water projects eligible for funding under Propositions 13, 50, 84, and 1 include water conservation, groundwater storage, surface storage,

water treatment, water quality, recycled water, water security, and Colorado River water management projects, many of which are within the scope of the California Water Plan.

The Antelope Valley region was awarded grant funds from Proposition 84 to update the 2007 Antelope Valley Integrated Regional Water Management Plan (IRWMP) to include a regional flood management plan. A major component of that plan will be identifying regional areas that can be used for large scale storm water retention and groundwater recharge, in order to increase the amount of annual return flows.

Mandatory Water Conservation

Following Governor Brown's declaration of a State of Emergency on July 15, 2014, the State Water Board adopted Resolution No. 2014-0038 prohibiting several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle, except where the hose is equipped with a shut-off nozzle; (3) the application of water to driveways and sidewalks; and (4) the use of potable water in non-recirculating ornamental fountains. The State Water Board resolution also directed urban water suppliers to implement the stage of their water shortage contingency plans that imposes mandatory restrictions on outdoor irrigation of ornamental landscaping or turf with potable water and to report monthly water production information to the State Water Board.

On April 1, 2015, in response to historically dry conditions, the Governor signed Executive Order B-29-15, which required a 25-percent reduction of urban potable water use throughout the State of California through February 28, 2016. The DWR was directed to lead a Statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought-tolerant landscapes, and the California Energy Commission was asked to implement a Statewide appliance rebate program to provide monetary incentives for replacing inefficient household devices. On November 13, 2015, the Governor signed Executive Order B-36-15 for additional actions to build on the State's ongoing response to record dry conditions and assist recovery efforts from 2015's devastating wildfires. On May 9, 2016, the Governor signed Executive Order B-37-16, which established a new water use framework for California that bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures.

On April 7, 2017, the Governor signed Executive Order B-40-17, which ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, State agencies, including DWR, released a plan to continue making water conservation a way of life.

Energy Conservation

Title 24, Part 6, Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (24 *California Code of Regulations* [CCR]] Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Commission (CEC) adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California reduce its greenhouse gas emissions to 1990 levels by 2020". The 2019 Building Energy

Efficiency Standards took effect on January 1, 2020. The 2022 Building Energy Efficiency Standards are currently in the pre-rulemaking phase.

Title 24, Part 11, Green Building Standards

The 2019 California Green Building Standards Code (CBSC) (24 CCR, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. CBSC was adopted in 2008 and went into effect August 1, 2009. CBSC was designed in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of GHG to 1990 levels by 2020. The Code is Part 11 of the California Building Standards Code in Title 24 of the *California Code of Regulations* and is also known as the CalGreen Code (CBSC 2020).

The development of the CalGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. The CalGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The Code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

Updated CBCS non-residential mandatory measures went into effect on January 1, 2019. These updates added new codes, such as amended section 5.106.5.3.5 pertaining to future EV charging spaces, as well as several amendments to Water Efficiency and Conservation (Division 5.3), Material Conservation and Resource Efficiency (Division 5.4), and Environmental Quality (Division 5.5) (Department of General Services 2018).

Solid Waste Disposal and Recycling

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires all jurisdictions to meet a 50 percent diversion goal by 2000 and thereafter, and requires all counties to prepare an Integrated Waste Management Plan. The County of Kern has adopted a Source Reduction and Recycling Element (SRRE) to comply with AB 939. The SRRE describes the programs, activities and efforts that the County has undertaken to comply with the 50 percent waste diversion goals. These programs include mandatory recycling, composting and organic diversion, special waste handling, solid waste facility capacity, and education and public information programs, as well as available funding and integration efforts.

California Solid Waste Reuse and Recycling Access Act of 1991

Faced with the challenge of trying to implement AB 939, the California Solid Waste Reuse and Recycling Access Act of 1991 was passed by the State legislature and instructs the California Integrated Waste Management Board (CIWMB, now the California Department of Resources Recycling and Recovery [CalRecycle]) to draft a "model ordinance" for the disposal of construction waste associated with development projects.

Solid Waste Disposal Measurement Act of 2008

The purpose of the Solid Waste Disposal Measurement Act of 2008 (SB 1016) is to make the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or in some cases employment) and (2) its disposal volume, as reported by disposal facilities.

Each year CalRecycle calculates each jurisdiction's per capita (per resident or per employee) disposal rates. If business is the dominant source of a jurisdiction's waste generation, the CIWMB may use the per employee disposal rate. Each year's disposal rate is compared to that jurisdiction's 50 percent per capita disposal target. As such, jurisdictions are not compared to other jurisdictions or the statewide average, but they are only compared to their own 50 percent per capita disposal target. Among other benefits, per capita disposal is an indicator that allows for jurisdiction growth because as residents or employees increase, report-year disposal tons can increase and still be consistent with the 50 percent per capita disposal target. A comparison of the reported annual per capita disposal rate to the 50 percent per capita disposal target is useful for indicating progress or other changes over time.

Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012. CalRecycle will review each jurisdiction's commercial recycling program every two to four years for compliance with AB 341.

Regional

Water Supply

Integrated Regional Water Management Plans

The City of California City, the Mojave Public Utilities District (MPUD), and the Antelope Valley East Kern Water Agency (AVEK) have recently formed the FVGB Integrated Regional Water Management Group (IRWMG) and are working on the IRWMP for the Fremont Valley Groundwater Basin to protect their water rights from outside influences. (This groundwater basin provides the majority of the City's water supplies.)

In addition, the Antelope Valley IRWMP was designed to serve as the Groundwater Management Plan for the Antelope Valley Basin and includes all the relevant components related to Groundwater Management Plans in the Water Code (Part 2.75, Section 10753), as well as the components recommended in DWR's Bulletin 118. It discusses water supplies, demands, and plans to ensure future reliability and encourages the efficient management of water supplies by water transfers and exchanges, desalination, and recycled water opportunities. The Antelope Valley IRWMP notes that nothing in that document will supersede or interfere with the adjudication of the basin, which was approved in December 2015.

Antelope Valley Groundwater Adjudication

A Stipulated Judgment (Judgment) was approved in December 2015 for the Antelope Valley Groundwater Adjudication. According to the Judgment, AVEK has an overlying pre-rampdown production right of 4,000 afy and an overlying production right of 3,550 afy at the end of the 7-year production rampdown period, which begins January 1, 2016. In addition to the overlying production right, AVEK has the right to produce an amount of imported water return flows in any year equal to the applicable percentage (34% for agricultural imported water use and 39% for municipal and industrial imported water use) multiplied by the average amount of imported water used by AVEK within the Basin, and outside the Basin but within the watershed of the Basin (as approved by the Watermaster), in the preceding 5-year period.

AVEK also has the rights to all imported water return flows from water imported through AVEK and not allocated to other parties identified in the Judgment. Carryover of unused production rights and imported water return flows are allowed for a period of up to 10 years (or longer) if a Storage Agreement is entered into with the Watermaster. The Watermaster appointed as a part of the Judgment is a five-member board with one representative each from AVEK and Los Angeles County Waterworks District 40, one other Public Water Supplier representative, and two landowner representatives.

AVEK customers also having overlying groundwater production rights per the Judgment have a total pre-rampdown production right of 38,000 afy. The final overlying production right of these customers will be 19,300 afy, indicating a reduced groundwater production right of 18,700 acrefeet after the end of the 7-year rampdown period.

City

Urban Water Management Plan

In compliance with the Urban Water Management Planning Act, the City's 2015 Urban Water Management Plan (UWMP) was approved by the City Council on April 11, 2017. The UWMP evaluates the City's water supplies to meet service area demands for the years 2020 through 2040. The City has been experiencing decreasing water demands since 2007. In 2015, the City produced 1,175 million gallons of water and served 14,233 persons for an average use of 226 gallons per capita per day (gpcd). This is below the 2015 interim target of 350 gpcd (10 percent less than historic water use of 389 gpcd1) and less than the City's 2020 water use target of 311 gpcd (20 percent of less than historic water use). With continued water conservation and improved water system efficiency, future water demands to 2040 were projected in the UWMP assuming an annual decrease in per capita water use of 2.0 gpcd and a 1.5 percent annual population increase. The total projected demand in 2040 is 2,201 million gallons per year. With a pumping capacity of 3,127 million gallons by 2020 and beyond, the City would be using 44 to 59 percent of its groundwater pumping capacity to serve demand. However, the City obtains approximately 75 percent of its total supply from groundwater resources, 24 percent from AVEK imported water and 1 percent recycled water. The City would have adequate water supplies to meet demands during a normal year, a single-dry year, and multiple dry years.

Emergency Response Plan

The City adopted an Emergency Response Plan in 1999 that considered a water contingency plan in the event of reductions in specific water supplies; dropping groundwater levels; changes in water quality; system failures; and disaster. It included a four-stage conservation plan that

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^{1 10-}year average water use from 2001 to 2010

proposes voluntary and mandatory rationing depending on the severity of the water supply shortage. Based on current and projected customer demands, the Emergency Plan indicates the water allocation for each customer type by priority and rationing stage.

No Waste Ordinance

The City's No Waste Ordinance includes prohibitions on various wasteful water uses, such as lawn watering during mid-day hours, washing sidewalks and driveways with potable water, and allowing plumbing leaks to go uncorrected for more than 24 hours after customer notification. Fire Department personnel is also notified to stop flowing hydrants (except when necessary). Any customer violating the regulations and restrictions on water use set forth in the ordinance receives a written warning for the first violation. With a second violation, the customer receives a written warning and the City may disconnect services. The violator will have to pay the cost of service disconnection and re-connection. Any willful violation occurring subsequent to the issuance of the second written warning constitutes a misdemeanor and may be referred to the Kern County District Attorney's office.

Water Shortage Contingency and Conservation Programs

The City implements water shortage contingency and conservation programs that include a public information campaign, tiered water rate structure, improved customer billing, free water use surveys or audits, required low-flow devices, retrofit of public landscaped areas, decreased line flushing, reductions in system water loss, and increase water waste patrols. Increases in water rates and penalties for violations of voluntary or mandatory water use reductions are also set each stage of the water shortage.

In response to the Executive Orders issued by the Governor on actions necessary to address the severe drought conditions within the State of California, the City initially responded with urgency ordinances in 2015 to set forth State-issued and additional City water use policies and restrictions to achieve the conservation mandated for the City, which had been 36 percent. Implementation of the urgency ordinance provisions did not yield the desired conservation results. It also became apparent to State and local officials that the drought and water crisis prompting mandated conservation would extend beyond 2015. Therefore, the City adopted Resolution No. 05-15-2623 to provide more consistent and long-term conservation policies and enforcement.

Waste Management Regulations

The City's Waste Management regulations are contained in Title 6, Chapter 2 of the Municipal Code. The regulations include prohibitions on the accumulation of wastes in public areas, waste scavenging, and the burial or burning of wastes. It sets standards for waste and recycling containers/receptacles and waste storage and also provides regulations for waste and recycling collection services and franchises.

Chapter 10 in Title 6 of the Municipal Code requires the diversion of 50 percent of waste tonnage, including concrete and asphalt, and 15 percent of waste tonnage excluding concrete and asphalt. Each applicant is required to submit a waste management plan as part of the building or demolition permit. During the term of the demolition or construction project, the contractor shall recycle or divert the required percentages of materials and keep records of tonnage or in other measurements approved by the Building Department that can be converted to tonnage. Sixty days after completion of demolition or construction, a completed waste management plan shall be submitted to the City that shows actual data on tonnage of materials recycled and diverted,

supported by receipts and weight tags or other records of measurement from recycling companies, deconstruction contractors or landfill and disposal companies.

4.18.2 EXISTING CONDITIONS

Existing utility systems and infrastructure serving the Project site are discussed below.

Water Infrastructure and Supply

The City water system consists of 6 wells, 5 reservoirs with 5.85 million gallons of total capacity, 313 miles of water lines, and approximately 4,430 service connections. Two additional wells are planned and four additional storage tanks are in the early planning stages (California City 2017). However, based on correspondence with the City, the two wells have not yet been constructed and the additional storage tanks remain in the planning stages (California City 2020a, California City 2020b). In 2015, the City produced 1,175 million gallons of water from groundwater resources and imported water from AVEK to serve demand within its service area. The six wells have the capability to produce 5,100 gallons per minute (gpm) or 2,850 million gallons per year, based on wells running with 100% uptime. From 2010 to 2015, the City only utilized 30 to 42 percent of the total well capacity. With the addition of the two wells, capacity will be 5,950 gpm or 3,127.32 million gallons per year. The City also has the ability to increase or decrease the amount of water purchased from AVEK, depending on demand. The 2015 AVEK UWMP projected that in 2020 California City allocations would be 1,070 afy or 348.66 million gallons (California City 2017).

The Project site is within the service boundaries of the City's water system and can be served by water from groundwater wells in the California City Subbasin of the Fremont Valley Groundwater Basin and surface water purchased from AVEK. Potable water is delivered to the Phase 1 Tank through the main distribution system from the City's well sources or AVEK supply. This tank is located approximately 0.7 mile north of the Project site. From the Phase 1 Tank, water either flows back by gravity to the main distribution system or is boosted to the upper pressure zones (Phases 2 to 4) through the series of subsequent storage tanks and booster stations (Psomas 2017a).

The Project site is located in the Phase 2 pressure zone (which is served by the Phase 1 Booster Pump Station [BPS] and the Phase 2 Tank). The nearest water line to the site is a 12-inch pipeline, which serves the existing California City Correctional Facility (CCCC) and extends from the CCCC site north along Virginia Boulevard for approximately 4,000 feet to Twenty Mule Team Parkway. This pipeline continues northeasterly along Twenty Mule Team Parkway for approximately 2,000 feet and connects to a 16-inch pipeline, which is the discharge pipeline from the City's Phase 1 BPS. The Phase 1 BPS takes suction from the adjacent 2.5-million-gallon (MG) Phase 1 tank and discharges into the 16-inch pipeline, which feeds the 12-inch pipeline serving the CCCC and also continues northeasterly approximately 5 miles to the 1 MG Phase 2 tank. Water from the Phase 2 tank is then pumped via the Phase 2 BPS to supply the Phase 3 tank, and water from the Phase 3 Tank is pumped via the Phase 3 BPS to supply the Phase 4 tank (which primarily serves the Silver Saddle Ranch development) (Psomas 2017a).

Wastewater (Sewer) Infrastructure and Treatment

The City maintains and operates the public sewer system, with sewer service available in portions of the "First Community" (western portion of the City's central core); all other areas are served by septic tanks with on-site subsurface disposal (California City 2017). Approximately 30 percent of the City is connected to the City's collection/treatment system, with 70 percent connected to septic systems (Psomas 2017b).

While not located within the First Community, the existing CCCC is served by the City's sewer system. The nearest sewer line to the Project site is located west of the site at the parking lot of the CCCC. The CCCC is served by 8-inch lines that connect to a 12-inch line that runs through a grinder and then turns westerly toward Virginia Boulevard and northerly to Gordon Boulevard, turning westerly to 145th Street and then running northerly to tie to the 18-inch pipeline on Twenty Mule Team Parkway. The pipeline in Twenty Mule Team Parkway extends southwesterly for approximately 2 miles then increases in diameter to 24 inches. The 24-inch pipeline continues southwesterly along Twenty Mule Team Parkway for 1.4 miles toward the intersection with Randsburg Mojave Road. Near the intersection, the pipeline turns westerly and increases in diameter to 27 inches and continues to the City's wastewater treatment plant (WWTP) on Nelson Drive (at the northeastern section of the City's central core) (Psomas 2017b).

The City's WWTP has a permitted capacity of 1.0 million gallons per day (mgd). According to City staff, the treatment facility is currently operating at approximately 0.65 mgd and has reached its effective maximum operating capacity. Treated effluent is stored in ponds at the WWTP and is either percolated, evaporated or delivered to the Tierra del Sol golf course for irrigation purposes (Psomas 2017b). Approximately 75 percent of the recycled water production is delivered to the golf course for irrigation (165.0 million gallons per year); 24 percent is lost to evaporation (52.8 million gallons per year); and approximately 1 percent is conveyed to existing ponds in the winter for groundwater recharge via percolation (Psomas 2017c).

Storm Drainage Infrastructure

Storm water generally percolates into the ground at the site, with sheet flows toward the southwest following the local topography. There is no constructed storm drainage system serving the site.

Solid Waste

Solid waste collection services in the City are provided by Waste Management (WM), a private waste hauler and landfill operator. WM facilities located nearest to the Project site include a transfer station and two landfills in the Antelope Valley: Lancaster Landfill and Recycling Center and the Antelope Valley Landfill (LACDPW 2019). Solid wastes from the City are also disposed at the Ridgecrest Recycling and Sanitary Landfill and the Mojave-Rosamond Sanitary Landfill (CalRecycle 2018a).

The Antelope Valley Landfill is located at 1200 West City Ranch Road in Palmdale. It has a maximum permitted daily capacity of 3,600 tons per day (tpd) and a remaining permitted capacity of 12,001,395 tons (16,131,440 cubic yards) (LACDPW 2019). The landfill's estimated remaining life is 22 years (LACDPW 2019).

The Lancaster Landfill and Recycling Center is located at 600 East Avenue "F" Street in Lancaster. It has a maximum permitted daily capacity of 3,000 tpd and a remaining permitted capacity of 10,231,322 tons (LACDPW). The landfill's remaining life is 23 years (LACDPW 2019).

The Ridgecrest Recycling and Sanitary Landfill is owned and operated by the County of Kern and is located at 3301 Bowman Road in Ridgecrest. It has 105 acres of disposal areas over 320 acres. The landfill is permitted to accept 701 tons of wastes per day and has a remaining capacity of over 5.0 million cubic yards in 2010. It is expected to close in 2045 (CalRecycle 2018b).

The Mojave-Rosamond Sanitary Landfill is owned and operated by the County of Kern and is located at 400 Silver Queen Road in Mojave. It has 544 acres of disposal areas over 1,688.5 acres. The landfill is permitted to accept 3,000 tons of wastes per day and has a remaining

capacity of over 76.0 million cubic yards in 2013. It is expected to close in 2123 (CalRecycle 2018c).

Electricity and Natural Gas

The Project area is served by the Southern California Edison Company (SCE) for electrical power services. SCE provides power to 15 million people over 50,000 square miles in Central, Coastal and Southern California (SCE 2020). A 33-kilovolt underground electrical power line is present on Virginia Boulevard, but ends approximately 320 feet north of Gordon Boulevard on the east side of Virginia Boulevard. The power line on Virginia Boulevard ties to the power lines on Twenty Mule Team Parkway.

Southern California Gas Company (SoCalGas) provides natural gas services to 21.8 million consumers in over 24,000 square miles throughout Central and Southern California (SoCalGas 2020a). Their service area includes California City but there are no gas lines or regulator stations near the site. The nearest significant gas line is located at the corner of Yerba Boulevard and California City Boulevard, in the western section of the City's central core.

Telecommunications

Existing telephone lines owned by Frontier Communications are present on Virginia Boulevard and serve the CCCC.

4.18.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds are from the Environmental Checklist in Appendix G of the State CEQA Guidelines. The Project would result in a significant impact related to Utilities and Service Systems if it would:

Threshold 4.18a: Require or result in the relocation or construction of new or expanded

water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation

of which could cause significant environmental effects.

Threshold 4.18b: Have sufficient water supplies available to serve the project and reasonably

foreseeable future development, during normal, dry and multiple dry years.

Threshold 4.18c: Result in a determination by the wastewater treatment provider which

serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing

commitments.

Threshold 4.18d: Generate solid waste in excess of State or local standards, or in excess of

the capacity of local infrastructure, or otherwise impair the attainment of

solid waste reduction goals.

Threshold 4.18e: Not comply with federal, state, and local management and reduction

statutes and regulations related to solid waste.

4.18.4 PROJECT DESIGN FEATURES

The following Project Design Features (PDF) would be implemented as part of the Project design:

- PDF UTL-1 The Project will include the construction of an additional 550 gpm pump at the Phase 1 BPS and the construction of a new water line from the existing water line in Virginia Boulevard along the easterly extension of the alignment of Gordon Boulevard toward the northwest corner of the site and new on-site fire and domestic/potable water lines that connect to proposed buildings, including new fire hydrants, as required by the California City Fire Department and/or Department of Public Works.
- PDF UTL-2 The Project will include the construction of new on-site sewer lines that connect to proposed buildings from the proposed sewer line at the southwestern corner of the site, as required by the California City Department of Public Works. In addition, a sewer lift station, force main line and/or holding tank may also be built on-site.
- PDF UTL-3

 The Project will include the construction of a new sewer line from the existing sewer line on Twenty Mule Team Parkway running parallel to the existing sewer line on 145th Street and Gordon Boulevard and under Option 1 running south on Virginia Boulevard and then east along the southern boundary of the existing CCCC to the site and turning south of the southwestern corner of the site or under Option 2 continuing east along the northern boundary of the existing CCCC to the site, which would be connected to a force main running north from a sewer lift station at the southwestern corner of the site. If a 100,000-gallon holding tank is built on site under this option, there may be no need to construct parallel sewer lines on Gordon Boulevard and 145th Street.

4.18.5 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirements (RR):

- RR UTL-1 The Project's water, sewer, storm drain, and other utility infrastructure improvements will be designed, constructed and operated in accordance with the applicable regulations set forth in the *California City Municipal Code*, which incorporates by reference the California Building Code, including the California Electrical Code, the California Mechanical Code, the California Plumbing Code, the California Fire Code, and the California Green Building Standards Code.
- The Project will be constructed and operated in accordance with the City's Waste Management regulations, as outlined in Title 6, Chapter 2 of the Municipal Code. The regulations prohibit the accumulation of wastes in public areas, waste scavenging, and the burial or burning of wastes; sets standards for waste containers/receptacles and waste storage; and waste collection services and franchises.
- The Project will prepare a waste management plan to comply with Chapter 10 in Title 6 of the Municipal Code and the CalGreen Code, which requires the diversion of 50 percent of waste tonnage, including concrete and asphalt, and 15 percent of waste tonnage excluding concrete and asphalt. The waste management plan shall be submitted to the City as part of the building or demolition permit; implemented during construction; and a completed waste management plan shall be submitted

to the City after construction that shows actual data on tonnage of materials recycled and diverted.

4.18.6 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.18a:

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?

Short-Term On-Site Construction Impacts

Water use and wastewater generation during construction would be short-term and in limited quantities. Spraying water on exposed soils for dust suppression during earth-disturbing activities (e.g., grading, excavation, and trenching) would be required in order to comply with the Eastern Kern Air Pollution Control District (EKAPCD) regulations, as outlined in RR AIR-1 in Section 4,3, Air Quality, and Rules 401, 402, 404.1 and 405 which include requirements for controlling fugitive dust and particulate matter concentrations and avoiding emission nuisances (see RR AIR-2). Demand for telecommunication and electrical services during construction of the Project would be limited and would be met by existing Frontier and SCE lines and facilities serving the area. Impacts would be less than significant, and no mitigation is required. No natural gas demand is expected during construction as no natural-gas construction equipment or vehicles are expected to be used. Consultation with Frontier would be made as part of the standard construction coordination to obtain telephone and telecommunication services. Since there are existing telephone lines serving the adjacent CCCC and Frontier provides service on demand, no adverse impacts on their services is expected with line extension and connection to serve the Project.

As discussed further below, connection and extension of the existing water line from Virginia Boulevard to the site would provide water for construction activities until on-site water system facilities are completed (PDF UTL-1). Wastewater would be disposed in portable toilets that would be subject to regular collection and off-site wastewater disposal, until the off-site and on-site sewer lines and on-site restroom facilities are completed (PDF UTL-2 and PDF UTL-3). Implementation of the Project would require off-site extensions of telecommunication, electrical and natural gas infrastructure. Therefore, physical impacts related to the construction of new on-site and off-site telecommunication and energy infrastructure are addressed as part of the Project analyzed throughout this EIR. The primary environmental impacts associated with infrastructure installation would be related to air quality and noise, as this component of construction involves mainly grading, excavation, and movement and placement of the infrastructure lines and facilities. As discussed in Section 4.3, Air Quality; Section 4.9, Hazards and Hazardous Materials; Section 4.10, Hydrology and Water Quality; and Section 4.13, Noise, there would be less than significant impacts after mitigation as related to the construction of telecommunication and energy infrastructure and no mitigation would be required.

Long-Term On-Site Operational Impacts

Water Service

Water service to the Project would be provided by the California City water system. Design and installation of the on-site water lines would be in accordance with applicable regulatory requirements (RR UTL-1), including the California City Building Code, which incorporates by reference the California Building Code. As stated in PDF UTL-1, the Project would include a new off-site 12-inch water pipeline extension from the existing 12-inch water line in Virginia Boulevard along the extension of the alignment of Gordon Boulevard, easterly to the Project site. This pipeline will provide sufficient fire flow and pressure to the Project. The 12-inch line would continue along the perimeter road to northeastern corner of the Project site, where it would become an 8-inch water line that would loop around the proposed facility, running southerly, westerly and northerly to join the 12-inch line near the proposed warehouse building. Individual water lines would tap into the 8- and 12-inch lines to serve the various buildings and areas on the Project site, Exhibit 3-3 (Onsite Water and Wastewater Improvements) and Exhibit 3-4a (Offsite Water Improvements), provided in Section 3.0, Project Description, of the Draft EIR show the proposed on-site and off-site water improvements. Physical impacts related to the construction of new, onsite and off-site water infrastructure are addressed as part of the Project analyzed throughout this EIR.

A water system capacity analysis was completed to determine if upgrades to the City's water system (i.e., pumps, water storage tanks, and pipelines) are needed to serve the water demand from the Project.

Pump Capacity - As provided in the following Table 4.18-2, the Project would require an average of 305,424 gallons per day (gpd) of water (or 212 gallons per minute [gpm]). Future operation of the approved corrections center on 39.6 acres southwest of the Project site would result in an additional average water demand of 222,200 gpd or 154 gpm. While water demands at the existing and proposed correctional facilities are not expected to have significant seasonal variation in water use (due to the lack of outdoor water use), a 20-percent increase in the average daily demand is assumed to account for the maximum day demand. With the maximum month demand within the Phase 2 pressure zone of approximately 500 gpm, the future production demand with the Project and the adjacent future corrections center would be 1,040 gpm (Psomas 2017a).

The Phase 1 BPS, which serves the Project site and existing CCCC, consists of two 50-horsepower pumps, each with a design flow of 500 gpm and a total dynamic head (TDH) of 300 feet for a combined capacity of 1,000 gpm. Analysis of water system's pumping capacity indicates that an additional pump is required at the Phase 1 BPS to serve the Project (Psomas 2017a) and would have to be installed as part of the Project (MM UTL-1). The additional pump will allow for the operation of two out of the three pumps to meet maximum day demand, with one pump serving as backup. These three pumps could then rotate operation as lead, lag, and backup. The Phase 1 BPS has an equipment building, concrete pad, and empty pump can that is capable of accommodating a new pump with no grading or earthwork required.

Water Storage Capacity - The existing water storage capacity by pressure zone is provided in Table 4.18-1.

TABLE 4.18-1 WATER STORAGE FACILITIES

Reservoir/Tank Name	High Water Level (ft)	Capacity (mg)
Phase 1	2,600	2.5
Phase 2	2,900	1.0
Phase 3	3,050	1.0
Phase 4	3,200	1.0
Ft: feet; mg: million gallons		
Source: Psomas 2017a.		

The City's 2002 Water Master Plan recommends a storage criteria of 1.25 times the maximum day demand for operational and emergency storage plus the volume required for fire storage. This is based on operational storage equal to 25 percent of a maximum day demand; and emergency storage equal to the volume of one maximum day demand.

The combined storage of the upper zones (Phases 2 through 4) is equal to 3.0 million gallons (MG) and the total required storage capacity to meet the City's criteria is 2.23 MG. The Phase 4 tank can serve the storage demand for the Silver Saddle Ranch (as the primarily water user for this pressure zone) of 0.92 MG. The Phase 2 and Phase 3 tanks (with a total storage capacity of 2 MG) can serve the existing CCCC, the proposed Project, and the future corrections or detention center, which have a combined storage demand of 1.32 MG. No additional water storage capacity is needed to serve the Project.

Pipeline Capacity - The hydraulic model for the pipeline capacity analysis assumed a peak hour factor of 2 times the average day demand for peak hour simulation and a maximum day demand conditions plus a fire flow of 1,500 gpm for fire flow conditions. The analysis showed that the existing 12-inch pipeline in Virginia Boulevard and Twenty Mule Team Parkway, which serves the CCCC site from the Phase 1 BPS, has sufficient capacity to meet the demand of the existing CCCC, the approved corrections center, and the proposed Project. No water line upgrades are necessary to serve the Project (Psomas 2017a).

Water Supplies – As discussed below under Threshold 4.18d, the Project's demand for water supplies from City's water system would not require other new facilities that may have impacts. The WSA for the Project indicates that the City would be able to meet the projected demands in its service area, along with the Project's demands, through 2040. The reliability of the City's future water supplies will be ensured through continued system maintenance and management, water conservation, and potential expansion of the recycled water system. With the addition of a pump at the Phase 1 BPS, no impact to the water system or facilities would occur due to future water service to the Project.

Sewer Service

Sewer service to the Project would be provided by the California City sewer system. Design and installation of the on-site and off-site sewer lines would be in accordance with applicable regulatory requirements (RR UTL-1), including the California City Building Code, which incorporates by reference the California Building Code. As stated in PDF UTL-2, the onsite sewer lines would extend to individual buildings within the proposed Project and collect sewage to the southwest corner of the site by gravity flow. Exhibit 3-3 (Onsite Water and Wastewater Improvements) and Exhibit 3-4b (Offsite Wastewater Improvements) provided in Section 3.0 of the Draft EIR, shows the proposed on-site and off-site sewer lines.

The capacity analysis for the sewer system serving the Project involved modelling of the sewage collection system, assuming a peaking factor of 2.0 and maximum allowable flow depths of 66 percent of the pipe diameter for 12-inch pipes (due to very low rainfall in the Project area and limited potential for infiltration) and 75 percent for large pipes. The analysis indicated that the 12-inch line from the CCCC to Twenty Mule Team Parkway would be operating at maximum depths (i.e., 66 percent) during peak sewer loads from the CCCC and the approved corrections center to the southwest of the site. Adding the sewage flows from the Project would cause the 12-inch pipeline to flow full for most of the reaches. Additional pipeline capacity is needed to convey peak sewage flows from the site to the pipeline in Twenty Mule Team Parkway (Psomas 2017b). The Project includes the construction of new off-site sewer lines to run parallel to the existing lines within the parking lot and along Virginia Boulevard, Gordon Boulevard, and 145th Street. Alternatively, an on-site holding tank would prevent exceedance of the capacities of the sewer lines on Gordon Boulevard, and 145th Street (PDF UTL-3). Implementation of PDF UTL-3 will provide adequate off-site sewer line capacity to serve the Project.

As discussed under PDF UTL-3, the wastewater collected by the proposed sewer line at the southwestern corner of the site would be conveyed to the WWTP through two alternative alignments for connection to the sewer pipeline on Twenty Mule Team Parkway. Refer to Exhibit 3-4b, Offsite Sewer Improvements, provided in Section 3.0 of the Draft EIR.

Under the Option 1 alignment, sewage from the southwest corner of the site would gravity flow (without pumping) to the north and then west to the existing 12-inch pipeline within the CCCC parking lot, where a new sewer line would then run parallel to the existing pipeline within the parking lot, along Virginia Boulevard, Gordon Boulevard, and 145th Street, before connecting to the 18-inch line on Twenty Mule Team Parkway.

Under the Option 2 alignment, an on-site sewer lift station would be constructed near the southwestern corner of the site, at which point the collected sewage will be run through an onsite grinder, and a force main would run northerly toward the proposed access road. Here, it would connect to a new sewer line that would extend westerly in the proposed access road (along the northern boundary of the CCCC) across Virginia Boulevard and a new parallel sewer line would run along Gordon Boulevard, then turning northerly on 145th Street before connecting to the 18-inch line on Twenty Mule Team Parkway. The Option 2 alignment could potentially utilize a force main to connect to the 18-inch pipeline in Twenty Mule Team Parkway, rather than a parallel gravity line. As an alternative to installing parallel pipelines to meet peak flow capacity, an approximate 28,000-gallon holding tank could be constructed onsite, along with the sewer lift station and force main for Option 2, in order to pump and discharge sewage from the site during off-peak periods and possibly eliminate the need for parallel lines on Gordon Boulevard and 145th Street. All options will be evaluated during the design phase of the Project to determine the preferred sewer line alternative.

The capacity of any parallel gravity pipelines will be shared by the Project and the approved corrections center. Based on the estimated bed count for each site, the Project would be responsible for approximately 58% of the parallel gravity pipeline improvements. The pipelines in Twenty Mule Team Parkway to the WWTP were evaluated for the most critical reach (i.e., smaller diameter reach with the shallowest slope). The sewer analysis showed that the combined peak flow from the existing CCCC, the approved but not built 2,200-bed corrections center, and the proposed Project on the 18-inch diameter critical reach of the sewer line on Twenty Mule Team Parkway would be 49 percent of its diameter. This projected flow is well within the design criteria of 75 percent full for an 18-inch pipeline. All other sewer reaches in Twenty Mule Team Parkway with larger diameters and/or steeper slopes would experience lower depths (i.e., < 49 percent) (Psomas 2017b). No upgrades to the sewer pipelines in Twenty Mule Team Parkway, as it runs southwesterly and then westerly to the WWTP are needed.

Since the City's WWTP has reached its effective maximum operating capacity, it is not expected to be able to accommodate additional flows from the Project (estimated at 0.28 mgd), from the future planned corrections center to the southwest of the Project site (0.20 mgd), or from other planned projects in the City. Additional treatment and disposal/storage capacity will be required at the WWTP, including increased seasonal storage and/or percolation pond capacity to accommodate the projected Project's sewage flow. Approximately 0.5 mgd of additional capacity is needed to serve the Project and the approved but not vet constructed 2200-bed correctional facility to the southwest of the site. As indicated in the Section 3.0, Project Description, an assessment of the City's WWTP was conducted which evaluated the existing operating conditions and provided recommendations for potential improvements that would restore the WWTP's treatment capacity its 1.0 MGD rated capacity and add needed redundancy so the City can confidently meet its permit requirements and allow for future expansion to 1.5 MGD to accommodate the flows associated with General Plan growth, septic system conversions and other developments (Hazen 2019). Additionally, improvements to expand the capacity and operational efficiency of the existing percolation and recycled water ponds would occur which would also enhance the overall operational capacity of the WWTP.

Two sets of recommendations were developed, (1) functional improvements and (2) reliability improvements, which cover items of work needed to enable the WWTP to function at its existing permitted and potentially expanded treatment capabilities. A preliminary implementation schedule and work activity estimate was prepared for the recommended improvements (Psomas 2020).

Functional improvements are identified as needed at facilities that are not properly functioning and require replacement to restore the desired level of plant performance; whereas, Reliability improvements are identified as needed at facilities that are currently functioning but are in imminent danger of failure and should be replaced to maintain the security of plant performance. Functional improvements at the City WWTP would occur with the aeration basins, clarifiers, tertiary filtration system, and sludge dewatering. While reliability improvements would occur with several operational systems associated with disinfection, grit removal, electrical and control, pumping, and solids dewatering. Additionally, improvements to expand the capacity and operational efficiency of the existing percolation and recycled water ponds would occur which would also enhance the overall operational capacity of the WWTP. All recommended improvements would occur within the current boundaries of the WWTP site and would not encroach into adjacent property. Importantly, the Project would contribute approximately 0.28 MGD of new demand to the City's WWTP operation; however, improvements are required to provide approximately 0.5 MGD of additional capacity at the facility as noted above for cumulative needs. The proposed Project would thus be responsible for its pro-rata share of impacts related to WWTP improvements based on the anticipated sewage flow of 0.28 MGD.

Based on input from City staff, in order to provide the additional capacity, the processes of the WWTP would have to be upgraded to serve the Project. The required improvements can be accommodated within the current operating boundaries of the WWTP site and need not encroach into adjacent property. These include potentially deepening and expanding the capacity of one or more of the existing percolation ponds to increase percolation or evaporation, new headworks and solids handling equipment; additional tertiary treatment and disinfection capacity, and a larger capacity pump station to boost additional recycled water conveyance to the golf course lake during peak irrigation season (Psomas 2017b). MM UTL-2 would require the Applicant to pay the proportional cost of improvements needed at the WWTP to increase its capacity and adequately serve the Project. Payment of this fee will allow the City to improve the WWTP facilities and operations as the need arises and would avoid adverse impacts related to new or expanded wastewater treatment facilities.

As stated above, the WWTP improvements needed to serve the proposed Project would be confined to the WWTP site where ongoing City wastewater treatment and related sewer service activities are occurring in compliance with Waste Discharge Requirements (WDRs) and related permits issued by the Lahontan Regional Water Quality Control Board (LRWQCB). The needed improvements would be generally part of the City's WWTP operating and maintenance procedures and would be completed under the City's existing WDRs that are the jurisdiction of the LRWQCB. Impacts associated with construction of WWTP improvements necessary to serve the proposed Project have been addressed separately in this EIR, as they relate to the potential for ground disturbance, air and storm water pollutants, biological, traffic and noise impacts during construction activities.

The impacts associated with installation of new sewer lines on public streets have been addressed separately in this EIR, as they relate to the potential for ground disturbance, air and storm water pollutants, biological, traffic and noise impacts during construction activities. Less than significant impacts related to the construction of off-site sewer infrastructure would occur with the Project and the long-term use of these off-site sewer lines; no mitigation would be required.

Natural Gas Service

The proposed Project is anticipated to have a natural gas demand of approximately 67,811 MBTU per year or approximately 5651 MBTU per month. A Will Serve Letter has been provided for the proposed Project (SoCalGas 2020c). Natural gas service to the Project would be provided by SoCalGas through new gas lines and facilities extending from their existing facilities near the intersection of Yerba Boulevard/California City Boulevard to the Project site. As indicated in Section 3.0, Project Description, based on the SoCalGas' understanding of current service needs in the City, the new gas line would be constructed within disturbed City road right of way from Yerba Boulevard east along California City Boulevard to Randsburg Mojave Road. The alignment would then follow along Randsburg Mojave Road to its intersection with Twenty Mule Team Parkway, turning south on 145th Street and then to Gordon Boulevard towards the Project site. SoCalGas has indicated that California City is slated for a "Pressure Betterment Program" which will increase natural gas pressure to the City due to the increased demand from existing customers, approved but not yet constructed projects, and future projects, including the proposed Project (SoCalGas 2020b). SoCalGas has confirmed that with the new gas delivery system improvements identified as part of the proposed Project and the increase in planned natural gas pressure, it can accommodate the proposed natural gas demand. Therefore, impacts are considered less than significant, and mitigation is not required.

Electricity Service

Based on the energy usage of the existing CCCC, the proposed Project is anticipated to have a demand for electricity of roughly 690,000 kWh per month on average,. A Will-Serve Letter was provided by SCE in 2016 and is still current based on correspondence with SCE (SCE 2020). In addition, SCE has confirmed capacity to meet the future demands of the proposed Project (SCE 2020). Based on current information provided by SCE, the Project is anticipated to be served by existing off-site SCE facilities (i.e., conduit and/or vault) located in Virginia Boulevard right-of-way near the intersection of Gordon Boulevard (SCE 2020). Impacts are considered less than significant, and mitigation is not required.

Telecommunications Service

As with the existing CCCC, Frontier Communications would provide telecommunications service to the proposed Project. Service would be provided by infrastructure existing on Virginia

Boulevard. The service would be provided in accordance with Frontier Communication's policies and extension rules on file with the California Public Utilities Commission. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to telecommunications would not occur. Additionally, the Project applicant will coordinate with Frontier Communications to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and mitigation is not required.

Long-Term Off-Site Operational Impacts

For the water and sewer infrastructure improvements discussed above, potential offsite impacts would be related to air quality, noise, and biological resources as this component of construction involves mainly grading, excavation, and movement and placement of the infrastructure lines and facilities. As discussed in Section 4.3, Air Quality, Section 4.9, Hazards and Hazardous Materials, and Section 4.13, Noise, there would be less than significant impacts after mitigation as related to the construction of water and sewer infrastructure and no further mitigation would be required. The proposed off-site water and sewer lines and WWTP improvements would provide water and sewer services to the Project but would not require new water or wastewater facilities. No long-term impact would occur.

Threshold 4.18b: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during

normal, dry and multiple dry years?

Short-Term On-Site Construction Impacts

Water use during construction would be short-term and in limited quantities. A connection to the existing water line on Virginia Boulevard would be made and a new water line constructed to run along the proposed access road to the site to provide the water needed for construction activities. With the available system capacities and short-term construction water demand, no new water supplies are needed. Impacts would be less than significant and no mitigation is required.

Long-Term On-Site Operational Impacts

The City purchased all water rights within the boundaries of or which may subsequently flow into the California City Proper. The City's UWMP states that it has significantly more water rights than the City currently uses. The City's groundwater (well) production is not limited by water rights but by pumping capacity since the City has 10.8 times more water rights than the current maximum groundwater pumping capacity of (2,680.56 million gallons) and could only utilize 25.7% of their water rights. The City also has excess production capacity that handles system demands year-round and during worst case summer demand months. In addition, an average of 75 percent of demand is met by groundwater and 24 percent of the City's water demand is met by imported water through AVEK. Thus, additional wells could be drilled and equipped to utilize unused water rights if needed in the future.

The estimated water demand for the Project was based on metered water use data for the existing CCCC. Water meter data for the existing facility was provided by the City for the years 2015 and 2016. Due to meter change-out and partial inaccuracies in the 2016 data, the 2015 data was utilized to develop monthly water use at the existing CCCC. The 2015 water consumption was 11,376,800 cubic feet (or 85.1 million gallons). A unit water demand of 101 gallons per day (gpd) per inmate is estimated based on water meter data for the CCCC and demand data from similar CoreCivic correctional facilities in the region.

With the Project's maximum capacity of 3,024 inmates and average water use conservatively estimated at 101 gpcd, total daily water use would be 305,424 gpd (111 million gallons or 32 afy). Table 4.18-2 provides the average water demand for the existing correctional facility based on meter data and the projected demands for the proposed Project and for the previously approved corrections or detention center.

TABLE 4.18-2 PROJECTED WATER DEMAND

	Operating	Unit Factor	Average Wa	Average Water Demand		
Description	Capacity (beds)	(gpd/bed)	gpd	gpm		
Existing CCCC	2,304 ¹	101	232,704 ²	162		
Approved adjacent correctional center	2,200	101	222,200	154		
Proposed Project	3,024	101	305,424	212		
Total	7,28	101	760,328	528		

CCCC: California City Correctional Center; gpd: gallons per day; gpm: gallons per minute Notes:

Source: Psomas 2017a

As shown, the Project would generate a demand for approximately 305,424 gallons of water per day or 111 million gallons per year. Combined with the water demands from the existing CCCC and future correctional facility planned southwest of the site, a total of 760,328 gallons of water per day would be needed.

To fully disclose and analyze the Project's potential water impacts, a WSA was prepared for the Project in compliance with the requirements of SB 610. The City's 2015 UWMP is the current UWMP for the Project area and therefore applies to the analysis of the Project's water supply. The UWMP notes that in 2015, the City produced 1,175 million gallons of water to serve demand within its service area but delivered only 804.5 million gallons. Approximately 370 million gallons was considered as water loss due to water main leaks, unauthorized consumption, and data handling errors. Assuming an annual decrease in per capita water use of 2.0 gpcd and a 1.5 percent annual population increase, the UWMP estimates 2020 demand at 1,741 million gallons and 2040 demand at 2,201 million gallons.

Indoor water demand from the Project is estimated at 111 million gallons per year, with no outdoor water use for landscape irrigation. Assuming the same water loss as the City system water loss of 31.5 percent, the Project's water demand would be 146 million gallons per year. This amount is equivalent to 6.6 percent of the total water demand projected for the City in 2040 (2,201 million gallons per year). The City has indicated that the Project's water demand has been accounted for in its 2015 UWMP.

Since the availability of imported water from AVEK is variable, the Project can be served by groundwater resources. The Fremont Valley Groundwater Basin is a low-priority basin pursuant to Section 10722.4 of the Water Code and is not identified as being overdrafted or becoming overdrafted if present management conditions continue. As indicated above, the City, MPUD, and AVEK are working on the IRWMP for the basin to protect their water rights.

^{1:} average inmate population of CCCC in 2015-2016

^{2:} average daily water use of CCCC in 2015

Existing Water Services

In 2015, the City obtained approximately 963 million gallons (82 percent of its water supply) from its groundwater wells and 212 million gallons (18 percent) from imported water supplied by AVEK. Approximately 167 million gallons of treated water/recycled water was used at the Tierra del Sol golf course. Over the past five calendar years, these water supply percentages averaged approximately 76 percent from groundwater sources, 24 percent from AVEK, and less than 1 percent from recycled water.

Projected Water Demands

Table 4.18-3 shows the demand projections for the City, as derived from the City's 2015 UWMP.

TABLE 4.18-3 CITYWIDE DEMAND PROJECTIONS (in million gallons per year)

Description	2015	2020	2025	2030	2035	2040
Existing Demand	1,175					
Projected Demand		1,741	1,815	1,890	1,966	2,201

Notes:

- Assumes an annual decrease in per capita water use of 2.0 gallons per capita per day (gpcd) from a 2020 base demand
 of 311 gpcd, which is the City's 20x2020 target (resulting from continued water conservation), and a 1.5 percent annual
 population increase
- All demands include estimated 31.5% water loss consistent with the 2015 UWMP
- Per Table 4.4-3 of the City's 2015 UWMP

Source: Psomas 2017c

Projected Water Supplies

The City's water supply is dependent on the availability of groundwater, to which the City owns all water rights. The City has historically relied on groundwater pumping for a large portion (approximately 75 percent) of its water supply and groundwater has accounted for 76 percent of the City's potable water supply since 2010. The City's six existing wells have a combined capacity of 5,100 gpm and usage rates have averaged only 36.1 percent of this capacity since 2010. With two new wells expected to be operational by 2020, the City's combined well capacity will increase to 5,950 gpm. Thus, the City's groundwater supply is not limited by water rights but by the pumping capacity of existing wells. Additional wells could be drilled and equipped to utilize unused water rights.

AVEK has approximately 85,460 acre-feet of imported water supply under normal conditions. Its groundwater banking projects provide an additional 3,550 acre-feet of water supply. In accordance with the Antelope Valley Groundwater Basin Adjudication, AVEK customers will have a reduced groundwater production right of 18,700 acre-feet after the end of the 7-year rampdown period. The AVEK's 2015 UWMP projects an annual supply to the City ranging from 1,070 acrefeet (349 million gallons) in 2020 to 1,240 acre-feet (404 million gallons) in 2035.

Table 4.18-4 provides the projected demand and available water supplies of the City system.

TABLE 4.18-4 CITYWIDE SUPPLY AND DEMAND (in million gallons per year)

Description	2020	2025	2030	2035	2040
Normal Demand ^a					
Total City Demand without Proposed Project	1,741	1,669	1,744	1,820	2,055
Proposed Project Demand	0	146	146	146	146
Total Normal Demand	1,741	1,815	1,890	1,966	2,201
Supply					
AVEK	349	365	385	404	404
Wells	1,392	1,450	1,505	1,562	1,797
Total	1,741	1,815	1,890	1,966	2,201
Well Capacity ^b	3,127	3,127	3,127	3,127	3,127
Well Supply Surplus	1,735	1,677	1,622	1,565	1,330
% Well Supply Surplus	125%	116%	107%	100%	74%

^a All demands include a 31.5% water loss

Source: Psomas 2017c.

With the projected well capacity of 3,127 million gallons per year (which would utilize only 30.0 percent of the City's groundwater rights of 10,427 million gallons (32,000 acre-feet), the City will have a well supply surplus ranging from 125 to 74 percent for the 2020 to 2040 planning period.

A comparison of projected City demand including the Project demands and projected supply under normal year supply/demand conditions is shown in Table 4.18-5. It is estimated in the City's 2015 UWMP that 80 percent of the City's well pumping capacity of 3,127 million gallons per year would be available at all times (2,502 million gallons per year). The AVEK supplies to the City are as reported in the 2015 UWMP under normal supply/demand conditions. As shown in the Table 4.18-5, the City can supply all projected demands with a supply surplus ranging from 64 to 32 percent for the planning period.

b Capacity of City wells projected to be 5,950 gpm = 3,127 million gallons per year

TABLE 4.18-5 CITYWIDE DEMAND AND SUPPLY – NORMAL YEAR (in million gallons per year)

Description	2020	2025	2030	2035	2040
Normal Year Demanda					
Total City Demand without Proposed Project	1,741	1,669	1,744	1,820	2,055
Additional Proposed Project Demand	0	146	146	146	146
Total	1,741	1,815	1,890	1,966	2,201
Available Supply	•	•			
AVEK	349	365	385	404	404
Wells @ 80% Capacity ^b	2,502	2,502	2,502	2,502	2,502
Total	2,851	2,867	2,887	2,906	2,906
Supply Surplus	1,110	1,052	997	940	705
% Supply Surplus	64%	58%	53%	48%	32%

^a All demands include 31.5% water loss

Source: Psomas 2017c.

Table 4.18-6 shows projected City demand including the Project demands compared with projected supply under single-dry year supply/demand condition. Again, it is estimated that 80 percent of the City's well pumping capacity of 3,127 million gallons per year would be available. The AVEK supplies to the City are reduced by 55.9 percent, 54.6 percent, 54.4 percent, 54.2 percent, and 54.2 percent, for 2020, 2025, 2030, 2035, and 2040 consistent with the reductions estimated in the AVEK 2015 UWMP under single-dry year supply/demand conditions. As shown in the table, the City can still supply all projected demands with a supply surplus ranging from 55 to 24 percent for the planning period.

TABLE 4.18-6
CITYWIDE DEMAND AND SUPPLY – SINGLE-DRY YEAR
(in million gallons per year)

Description	2020	2025	2030	2035	2040
Single-Dry Year Demand ^(a)					
Total City Demand without Proposed Project	1,741	1,669	1,744	1,820	2,055
Proposed Project Demand	0	146	146	146	146
Total	1,741	1,815	1,890	1,966	2,201
Available Supply		•		•	
AVEK	195	199	209	219	219
Wells @ 80% Capacity ^(b)	2,502	2,502	2,502	2,502	2,502
Total	2,697	2,701	2,711	2,721	2,721
Supply Surplus	956	886	821	755	520
% Supply Surplus	55%	49%	43%	38%	24%

a All demands include 31.5% water loss

Source: Psomas 2017c.

Projected City demand and supply for multiple-dry year conditions through the planning period is shown in Table 4.18-7. The AVEK supply is reduced by percentages consistent with the

Capacity of City wells projected to be 80 percent of 5,950 gpm or 2,502 million gallons per year

Capacity of City wells projected to be 80 percent of 5,950 gpm or 2,502 million gallons per year

reductions in AVEK's 2016 UWMP and the City's groundwater supply is estimated at 80 percent of well pumping capacity. As shown in the table, the City can still supply all projected demands with a supply surplus ranging from 62 to 29 percent for the planning period.

TABLE 4.18-7
CITYWIDE SUPPLY AND DEMAND – MULTIPLE-DRY YEAR
(in million gallons per year)

De	scription	2020	2025	2030	2035	2040
	Demand w/o Project	1,741	1,669	1,744	1,820	2,055
	Proposed Project	0	146	146	146	146
	Total Demand	1,741	1,815	1,890	1,966	2,201
First Year	AVEK	237	243	255	267	267
riist reai	Wells @ 80% Capacity	2,502	2,502	2,502	2,502	2,502
	Total Supply	2,739	2,745	2,757	2,769	2,769
	Supply Surplus	998	930	867	803	568
	Supply Surplus %	57%	51%	46%	41%	26%
	Demand w/o Project	1,741	1,669	1,744	1,820	2,055
	Proposed Project	0	146	146	146	146
	Total Demand	1,741	1,815	1,890	1,966	2,201
Second Year	AVEK	262	268	281	294	294
Second real	Wells @ 80% Capacity	2,502	2,502	2,502	2,502	2,502
	Total Supply	2,764	2,770	2,783	2,796	2,796
	Supply Surplus	1,023	955	893	830	595
	Supply Surplus %	59%	53%	47%	42%	27%
	Demand w/o Project	1,741	1,669	1,744	1,820	2,055
	Proposed Project	0	146	146	146	146
	Total Demand	1,741	1,815	1,890	1,966	2,201
Third Year	AVEK	310	317	333	348	348
Tilliu feal	Wells @ 80% Capacity	2,502	2,502	2,502	2,502	2,502
	Total Supply	2,812	2,819	2,835	2,850	2,850
	Supply Surplus	1,071	1,004	945	884	649
	Supply Surplus %	62%	55%	50%	45%	29%
Source: Psomas 2	2017c.					

In summary, the City has available water rights and pumping capacity to meet additional water demand due to future growth, as well as Project water demand. The WSA also states that the City can meet the water demands from the Project and other existing and future developments within its service year during a normal year, single dry year, and multiple dry years, with remaining surplus supply. There is sufficient and reliable water supply to serve water demand in the City, now and in the future and there will be sufficient water supply to serve the proposed Project and the projected City-wide growth. Impacts would be less than significant and no mitigation is required.

Long-Term Off-Site Construction and Operational Impacts

Water use during construction of off-site access road, utility infrastructure and public facility improvements would be short-term and in limited quantities. The use and operation of the proposed access road and utility line extensions and public facility improvements are not expected to require new water supplies in the long-term. No impact on water supplies would occur.

Threshold 4.18c:

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Short-Term On-Site Construction Impacts

Wastewater generation during construction would be short-term and in limited quantities. Portable toilets would be used during this phase until the off-site and on-site sewer lines and on-site restroom facilities are completed (PDF UTL-2 and PDF UTL-3). No new wastewater treatment capacity would be needed. Impacts would be temporary and less than significant; no mitigation is required.

Long-Term On-Site Operational Impacts

As discussed under Threshold 4.18b above, the Project would include the construction of on-site sewer lines to serve individual buildings (PDF UTL-2) and off-site sewer lines to connect to the existing sewer line in Twenty Mule Team Parkway (PDF UTL-3). While no upgrades to the sewer pipelines in Twenty Mule Team Parkway (as it runs southwesterly and then westerly to the City's WWTP) are needed, additional treatment and disposal/storage capacity will be required at the WWTP, including increased seasonal storage and/or percolation pond capacity to accommodate the proposed Project's sewage flow.

MM UTL-2 requires the Applicant to pay the proportional cost of improvements needed at the WWTP to adequately serve the Project. Payment of this fee will allow the City to improve the WWTP facilities and operations as the need arises and would avoid adverse impacts related to new or expanded wastewater treatment facilities. Less than significant impacts related to the wastewater treatment capacity would occur after mitigation.

Short-Term and Long-Term Off-Site Impacts

The construction and use of the proposed access road and utility line extensions and facility upgrades are not expected to generate sewage or wastewater that would require conveyance or treatment at the City's WWTP. No impact on wastewater treatment capacity would occur.

Threshold 4.18d:

Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Short-Term On-Site Construction Impacts

Construction of the Project would result in the generation of solid wastes, which would consist of excess soils, cleared vegetation, and construction debris. Using a generation factor for non-residential construction debris of 3.89 pounds per square foot (USEPA 1998), the total floor area of approximately 1.57 million square feet of proposed construction would generate approximately 3,054 tons of solid waste.

Compliance with the CalGreen Code and the City's construction waste management regulations (RR UTL-3) is required during Project construction. A waste management plan would be prepared that contains the estimated total weight of the Project's construction and demolition (C&D) wastes; vendors for the recycled and reused wastes; and the percentage of wastes diverted away from the landfill. This would reduce this waste weight by at least 65 percent to approximately 1,069 tons or 3,563 cubic yards, assuming an average weight of 0.3 tons per cubic yard. These solid

wastes would be generated in the short-term (over 42 months for both phases) and could be accommodated by the remaining landfill capacity at the Lancaster Landfill or the Antelope Valley Landfill. The combined estimated remaining capacity at these 2 nearest landfills is approximately 26.5 million cubic yards. Therefore, the Project's estimated construction waste volume would represent approximately 0.011 percent of the remaining capacity of these landfills and are within each landfill's daily capacity limit of 3,000 tpd and 5,100 tpd, respectively. Therefore, with compliance with RR UTL-3, there would be a less than significant impact on landfill capacity from the short-term construction solid waste disposal needs of the Project, and no mitigation is required.

Long-Term On-Site Operational Impacts

The long-term operation of the proposed Project would generate solid wastes that would require disposal at the Lancaster Landfill or Antelope Valley Landfill or other landfills that can accept waste from the Project site.

Solid waste generated during operation of the Project is estimated at 11,189² to 16,200³ pounds or 5.59 to 8.1 tons per day, using the City's per capita disposal rate in 2019 of 3.7 pounds per resident per day and 27.0 pounds per employee per day (CalRecycle 2020). The proposed Project would operate a number of recycling programs in compliance with City regulations (RR UTL-2). This may include paper, cardboard, plastic, and glass segregation, waste oil recycling, and other waste reduction programs. Therefore, solid waste generation by the Project would be reduced through the implementation of various recycling programs.

As discussed above, the combined estimated remaining capacities of the Lancaster Landfill and the Antelope Valley Landfill is approximately 26.4 million cubic yards. With no consideration of the effects of on-site recycling and waste reduction, the Project's daily solid waste generation would represent less than 0.1 percent of the Lancaster Landfill's available daily tonnage of 5,100 tons of solid wastes per day or 0.1 percent of the Antelope Valley Landfill's available daily tonnage of 3,000 tons of solid wastes per day.

Therefore, the proposed Project would be served by landfills with sufficient permitted capacity to accommodate its estimated long-term solid waste disposal needs. There would be a less than significant impact and no mitigation is required.

Off-Site Impacts

The proposed access road and utility line extensions and facility improvements are not expected to generate solid wastes in the long-term that would require landfill disposal and capacity. Construction wastes from these off-site improvements would result in minor waste disposal needs. Impacts would be less than significant with compliance with RR UTL-3, and no mitigation is required.

Threshold 4.18e: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Short-Term On-Site Construction Impacts

Construction of the proposed Project would comply with all applicable construction waste regulations, including the CalGreen Code and the City's construction waste management

Assumes 3,024 inmates generate 3.0 pounds of wastes per day

Assumes 600 employees generate 27.0 pounds of wastes per day

regulations (RR UTL-3) to reduce construction waste volumes by at least 65 percent. Therefore, there would be a less than significant impact related to solid waste regulations and no mitigation is required.

Long-Term On-Site Operational Impacts

The proposed Project would implement recycling programs in compliance with City regulations (RR UTL-2), which have been adopted to comply with solid waste regulations such as the California Integrated Waste Management Act (AB 939). Hazardous wastes would also be disposed of in accordance with existing regulations outlined in Section 4.8, Hazards and Hazardous Materials. Therefore, there would be a less than significant impact related to solid waste regulations and no mitigation is required.

Short-Term and Long-Term Off-Site Impacts

Construction of the off-site improvements would comply with the CalGreen Code and the City's construction waste management regulations (RR UTL-3) to reduce construction waste volumes by at least 65 percent. The long-term use of the proposed access road and utility line extensions and facility improvements would not generate solid wastes that would require compliance with solid waste regulations. There would be a less than significant impact related to solid waste regulations and no mitigation is required.

4.18.7 CUMULATIVE IMPACTS

Water Infrastructure and Supply

As discussed above, the City's water system has adequate water supplies to serve the Project and other planned/new development in the City. The Project would implement MM UTL-1 to ensure adequate water service to the site. Similarly, future growth and development in the City would have to construct water system connections and/or upgrades on an individual basis to be served by the City's water system. Impacts would be less than significant and no mitigation is required.

Wastewater Infrastructure and Treatment

As previously indicated, approximately 0.28 mgd of additional treatment capacity is needed to serve the Project. Future growth and development in the City including the approved but not yet constructed 2,200-bed correctional center would generate additional sewage volume requiring treatment and disposal which would require the expansion of the WWTP to approximately 1.5 MGD to accommodate the flows associated with General Plan growth, septic system conversions and other planned/approved developments. Future development in the City would require coordination with the City to ensure payment of service and facilities fees and applicable fair share contribution toward WWTP improvements necessary to accommodate wastewater flows of up to 1.5 MGD, to ensure sewer service to future developments in the City. No long-term impacts to sewer service and facilities would occur after mitigation of Project impacts (MM UTL-2); thus, no significant adverse cumulative impacts are anticipated from the Project or cumulative projects and no mitigation is required.

Storm Drainage Infrastructure

Similar to the Project, construction of on-site storm drain infrastructure by individual projects would have no impacts on properties outside the sites, since no increase in off-site runoff would occur and no hydrologic conditions of concern would be created by new development or major

redevelopment projects. This requirement would ensure that no increase in storm water volume or flow rates are generated by individual developments through implementation of BMPs for onsite retention, detention, ground infiltration, or other similar measures, as discussed further in Section 4.10, Hydrology and Water Quality. Thus, there would be no cumulatively considerable impacts associated with storm drain infrastructure and no mitigation is required.

Solid Waste

Future growth and development in the area and the Project would generate solid wastes that would require collection and disposal services. Sufficient capacity exists at the Antelope Valley Landfill and the Lancaster Landfill to serve future developments in the area. In addition, the Ridgecrest Landfill and the Mojave-Rosamond Landfill in Kern County have sufficient capacity to serve the Project. Recycling and waste reduction measures will be implemented by individual developments, in accordance with RR UTL-2 and RR UTL-3. These programs would reduce solid waste volume and demand for landfill capacity. No significant cumulative impacts would occur and no mitigation is required.

Electricity, Natural Gas and Telecommunications

Electricity, natural gas and Telecommunication are provided on-demand, based on the regulations of the California Public Utilities Commission (CPUC). As discussed above, the dry utilities serving the Project site can serve the Project with the proposed utility line extensions to the site. In addition to existing demands in their respective service areas, service providers can serve the Project and future developments in the surrounding areas. Cumulative impacts would be less than significant and no mitigation is required.

4.18.8 MITIGATION MEASURES

- MM UTL-1 The Applicant shall pay for the installation of an additional water pump at the City's Phase 1 BPS. The new pump shall be added to the existing pump station with a capacity of approximately 550 gallons per minute (gpm) and a total dynamic head (TDH) of 300 feet to match the head on the existing pumps and meet the maximum day demand within the pressure zone.
- MM UTL-2 The Applicant shall pay its fair share costs for the improvements needed at the City's wastewater treatment plant based on the proposed Project's anticipated sewage flow of 0.28 MGD. Functional improvements would occur to the aeration basins, clarifiers, tertiary filtration system, sludge dewatering and percolation/evaporation ponds while reliability improvements would occur with several operational systems associated with disinfection, grit removal, electrical and control, pumping, and solids dewatering.

4.18.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the PDFs, RRs, and MMs UTL-1 and UTL-2, the Project would result in less than significant adverse impacts related utilities and service systems after mitigation.

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4.19 WILDFIRE

4.19.1 RELEVANT PROGRAMS AND REGULATIONS

<u>State</u>

CAL FIRE's Fire Prevention Program consists of various activities including wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement. Common projects include fire break construction and other fire fuel reduction activities that lessen the risk of wildfire to communities. These activities include brush clearance around communities, along roadways and evacuation routes. Other important activities include defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, implementation of the State Fire Plan, fire-related law enforcement activities such as investigations to determine fire cause and origin as well as arson cases, and support for local government fire safe planning in the State Responsibility Area (SRA).

CAL FIRE prepares fire hazard severity zone (FHSZ) maps for SRA and Local Responsibility Areas (LRA) considering many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area (CAL FIRE 2007).

Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. Local Responsibility Area (LRA) include incorporated cities, cultivated agricultural lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government (CAL FIRE 2007). CAL FIRE's Director evaluates fire hazard severity in local responsibility area and makes a recommendation to the local jurisdiction where very high Fire Hazard Severity Zones exist. The Government Code then provides direction for the local jurisdiction to take appropriate action. CAL FIRE uses an extension of the state responsibility area Fire Hazard Severity Zone model as the basis for evaluating fire hazard in local responsibility area.

The local responsibility area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

The proposed project site is not located within either an SRA and LRA fire hazard severity zone and is not located in a Very High Fire Hazard Severity Zone (VHFHSV) as identified on the CALFIRE Fire Hazard Severity Zone Map for Kern County (CAL FIRE 2008).

California Fire Code

The California Fire Code (*California Code of Regulations*, Title 24, Part 9) is designed to be adopted by reference into local ordinances. The purpose of the Fire Code is to ensure the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials, and devices and from conditions hazardous to life or property. It includes regulations for Group I-3 buildings, which includes detention centers, jails, and prisons. Requirements include annual employee training on fire suppression equipment; 24-hour staffing; release locks for emergency evacuations; sprinkler system requirements; flame-resistant furniture; fire alarm systems; and refuge area capacity standards.

California Public Resources Code

California Public Resources Code Sections 4291 et seq. requires that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure.

City

California City Fire Code

The California City Fire Code (Municipal Code, Title 4, Chapter 1, Article 1), which incorporates, by adoption, the latest edition of the California Fire Code, provides minimum standards to safeguard the public's safety and welfare in relation to fire hazards. New construction, rehabilitation, alteration, and/or expansion are required to comply with the Fire Code, with the City Fire Department having authority to inspect buildings and premises for compliance and to correct conditions that may cause fire or contribute to its spread.

California City Municipal Code

Title 4 of the City's Municipal Code sets the City's regulations related to public safety (i.e., fire prevention, traffic, and firearms) and Title 5 addresses public welfare, including public nuisance. Title 4, Chapter 1 of the City's Municipal Code adopts the California Fire Code by reference and provides additional City regulations for fire prevention as it relates to burning and fireworks. Title 8, Chapter 1 of the Municipal Code adopts the Uniform Building Code by reference and Title 8, Chapter 2 adopts the National Electrical Code by reference. Chapter 3 establishes Fire Zones in the City. The City indicated this refers to the Fire Hazard Severity Zone, as designated by the California Department of Forestry and Fire Protection (CalFire). As discussed in Section 4.9, Hazards and Hazardous Materials, the site and the City are located in a LRA Moderate Fire Hazard Severity Zone (CalFire 2007).

California City General Plan

The California City General Plan contains basic principles for development that is coordinated with the provision of adequate infrastructure, public facilities and public services. The Land Use Element of the General Plan includes a Government (Public Facilities) designation for government and quasi-government facilities (i.e., City Hall, fire stations, police stations, wastewater treatment plant, parks and schools). The majority of areas designated as Government are in the central core area of the City. The Open Space and Conservation Element includes an implementation measure to require new development to provide sufficient water supply for fire flow. The Safety Element of the General Plan sets an overall goal to protect the community from fire hazards, including structural fires and wildland fires and has a policy to ensure new development does not create a burden on emergency response services; that sufficient fire protection and police protection services and fire flows are provided; that adequate street widths and clearances for emergency response are available; and that development meets code requirements for fire safety and fire suppression systems. It also encourages all new development to implement Community Policing Through Environmental Design (CPTED Site Definition Source) design techniques and standards that increase safety (California City 2009).

4.19.2 EXISTING CONDITIONS

The Project site and areas to the north, east and south of the Project site are comprised of vacant undeveloped desert land, characterized by open ground with limited vegetation. Granitic bedrock outcrops and rocky to gravelly soils are overlain by a shallow layer of sandy gravelly alluvium, with small drainage channels that run from the northeast to the southwest.

Neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. Rather, the Project area, including the site, is within the area designated as a Moderate Fire Hazard Severity Zone (CalFire 2007).

4.19.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the State CEQA Guidelines.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Threshold 4.19a	Substantially	impair	an	adopted	emergency	response	plan	or
	emergency ev	acuation	ı pla	ın?				

Threshold 4.19b Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Threshold 4.19c Require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Threshold 4.19d Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?

4.19.4 REGULATORY REQUIREMENTS

The Project would need to comply with the following Regulatory Requirements (RR):

- RR PS-1 in Section 4.15. Public Services and Recreation.
- RR TRA-1 in Section 4.16, Traffic and Transportation

4.19.5 ENVIRONMENTAL IMPACT ANALYSIS

Threshold 4.19a

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Short-Term and Long-Term On-Site Impacts

As indicated above, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. Onsite construction activities at the site would not affect emergency response or evacuation at the adjacent CCCC since construction would be confined to the site and the proposed Project would not affect access points to and from the existing CCCC. Virginia Boulevard, Gordon Boulevard, and Twenty Mule Team Parkway would remain accessible during construction activities. In the event of a disaster, disturbance, or emergency, the emergency plans and procedures that have been developed for the Project would be followed, in accordance with the American Correctional Association (ACA) standards and as applicable and required by Title 15 of the *California Code of Regulations* and US Bureau of Prison policies and program statements for federal facilities, as necessary. In addition, the California City Fire and Police Departments would also review the Project's building plans to ensure that adequate access for emergency vehicles and evacuation routes are available at the proposed Project site, as required by the City's Fire Code (RR PS-1 in Section 4.15, Public Services and Recreation).

The Kern Multi-Jurisdiction Hazard Mitigation Plan (HMP) was adopted by the City of California City on June 17, 2014. The HMP identifies the potential hazards in the County and assesses the risks and vulnerabilities across the planning area. The HMP also sets goals and objectives based on the risk assessment and includes specific recommendations to mitigate disaster losses (Kern County 2012b). The Project would not conflict with the actions identified for California City (which include the replacement of water supply pumping systems, as necessary) and would not obstruct implementation of the HMP. No adverse impacts would occur.

Short-Term and Long-Term Off-Site Impacts

Installation of the new pump at the City's Phase 1 BPS and improvements to the WWTP would be confined to these sites and would not affect emergency response or emergency evacuation of adjacent sites or land uses. During short-term construction activities for the new water, sewer, power, telecommunications, and natural gas lines on public rights-of-way, potential travel lane obstruction may occur but would be minimized by compliance with the City's regulations and encroachment permit conditions (RR TRA-1 in Section 4.16, Traffic and Transportation), which requires the implementation of temporary traffic-control measures for the maintenance of access to individual lots; vehicle traffic and pedestrian safety; reduced congestion and traffic flow interruptions; and notification of emergency personnel. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and no mitigation is required.

Threshold 4.19b

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As indicated above, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. However, a project could exacerbate wildfire risks by adding fuel in an area subject to wildfires; by adding ignition sources such as roads, powerlines, and/or powered equipment; by adding resources to an area (e.g., people or structures); or by exacerbating the effects of wildfire on affected resources. The Project would add structures and human occupancy to the site and construction of the Project would be in compliance with applicable fire code and building code requirements. Therefore, implementation of the Project would not exacerbate wildfire risks on or near the site. Impacts would be less than significant, and mitigation is not required.

Threshold 4.19c

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

As indicated above, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. The Project, similar to other such projects, has the potential to increase the risk associated with wildfires due to the presence of heavy construction equipment, including the use of flammable liquids and the presence of internal combustion engines, which could generate sparks or cause leaks that create fire risks. However, the use of these materials and equipment is heavily regulated and would be used in compliance with applicable fire code and building code requirements.

Therefore, with compliance of such requirements, installation or maintenance activities would not exacerbate wildfire risk and would not cause environmental impacts other than those analyzed throughout this EIR. Impacts would be less than significant, and no mitigation is required.

Threshold 4.19d

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?

As indicated above, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. As indicated in Section 4.7, Geology and Soils, there are no steep slopes on the Project site where landslides may occur. Additionally, no landslides have been identified or mapped at the Project site and landslides or signs of slope instability were not observed at the site. As indicated in Section 4.10, Hydrology and Water Quality, the Project would maintain or reduce the existing runoff volume and rate and would prevent the creation of flooding on-site or off-site. The Project site is designed at Zone X-areas determined to be outside of the 500-year floodplain (FEMA 2008). The site is also located outside the flood hazard areas identified in the City's General Plan (California City 2009). The proposed Project would not expose people or structures to risks subsequent to wildfire, such as downslope or downstream flooding or landslides as a result of runoff, slope instability, or drainage change. Impacts would be less than significant, and no mitigation is required.

4.19.6 CUMULATIVE IMPACTS

The area considered for cumulative wildfire impacts is the western Mojave Desert, between the southern Sierra Nevada and the San Gabriel Mountains. The Mojave Desert is not located within a Very High Fire Hazard Severity Zone. All future development projects in the City must comply with the City's Fire Code and those in the County with the County Fire Code to prevent the creation of fire hazards. Future development would also have to comply with pertinent City and County regulations related to public safety. Cumulative impacts would be less than significant.

4.19.7 MITIGATION MEASURES

Mitigation measures are not required.

4.19.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would result in less than significant impacts related wildfire. No significant unavoidable or cumulative impacts would occur.

4.19.9 REFERENCES

- California City, City of. 2009 (October 6). City of California City Final General Plan. California City, CA: City of.
- California Department of Forestry and Fire Protection (CalFire). 2007 (September 24). Draft Fire Hazard Severity Zones in LRA. Sacramento, CA: CalFire. http://frap.fire.ca.gov/webdata/maps/kern/fhszl06_1_map.15.pdf
- Federal Emergency Management Agency (FEMA). 2008 (September 28). Flood Insurance Rate Map Map Number 06029C2965E. Washington, D.C.: FEMA.

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SECTION 5.0 PROJECT ALTERNATIVES

5.1 INTRODUCTION

Section 15126.6(a)–(b) of the CEQA Guidelines (14 *California Code of Regulations* [CCR] provides guidance on the range of alternatives to a proposed project that must be evaluated in the EIR. The State CEQA Guidelines state:

- (a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The Lead Agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
- (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

Pursuant to the State CEQA Guidelines, a range of alternatives to the proposed Project is considered and evaluated in this EIR. These alternatives were developed in the course of Project planning and environmental review. The discussion in this section provides:

- 1. A description of alternatives considered:
- 2. An analysis of whether the alternatives meet most of the objectives of the proposed Project (as presented in Section 1.5 and 3.3 of this EIR and restated below); and
- 3. An analysis comparing the alternatives under consideration and the proposed Project. The focus of this analysis is to determine if alternatives are capable of eliminating or reducing the significant environmental effects of the proposed Project to a less than significant level.

5.2 CRITERIA FOR SELECTING ALTERNATIVES

Several criteria were used to select alternatives to the proposed Project. These criteria include the alternative's ability to achieve Project objectives; feasibility; and ability to eliminate or reduce significant impacts. Each of these are described below.

5.2.1 ABILITY TO ACHIEVE PROJECT OBJECTIVES

The ability of an alternative to meet most of the Project objectives is an important component when evaluating alternatives. When an alternative is selected, not only are the environmental impacts considered but so is the alternative's ability to meet the Project's intended objectives. Section 15126.6(f) of the State CEQA Guidelines (14 CCR) states:

The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.

The following objectives have been identified for the proposed Project:

- 1. To provide secure facilities that satisfy the standards and requirements of various potential end-users, including but not limited to Federal and State correctional agencies.
- 2. To provide facilities that satisfy the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum-, low-, medium-, and high-security.
- 3. To maximize the opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective housing of inmates by including sufficient space for programming and support facilities within a secure and monitored environment.
- 4. To maximize the opportunities for reducing overcrowding in federal and/or State prisons according to the applicable standards for rated capacity.
- 5. To develop correctional facilities in an appropriate location that reduces the potential for land use conflicts; minimizes traffic, lighting, and noise impacts to sensitive land uses and urban centers, and avoids environmentally sensitive resources.
- 6. To provide secure and humane housing of the targeted inmate or detainee populations in facilities that are safe and secure for the inmates, staff and community residents and that address American Correctional Association (ACA) standards for adult male facilities.

5.2.2 FEASIBILITY

When developing alternatives for evaluation in an EIR, the feasibility of implementing the alternative must be considered. If a range of alternatives is developed but, due to regulatory restrictions, none of the alternatives could be potentially implemented, the analysis would not meet the CEQA intent to provide a reasonable range of feasible alternatives. Section 15126.6(f)(1) of the State CEQA Guidelines (14 CCR) states:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; see *Save Our Residential Environment v. City of West Hollywood* (1992) 9 Cal.App.4th 1745, 1753, fn. 1).

It has been recognized that, for purposes of CEQA, "feasibility" encompasses "desirability" to the extent that the latter is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001). This balancing is harmonized with CEQA's fundamental recognition that

policy considerations may render alternatives impractical or undesirable (lbid.; see also *California Public Resources Code*, Section 21081; 14 CCR 15126.6(c) and 15364).

5.2.3 ELIMINATION/REDUCTION OF SIGNIFICANT IMPACTS

Section 15126.6(b) of the State CEQA Guidelines states that "[b]ecause an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly".

The proposed Project, as evaluated in Sections 4.1 through 4.19 of this EIR, would result in a range of impacts. The alternatives evaluated in this section have been developed to reduce and/or eliminate one or more potentially significant impacts associated with the proposed Project. The proposed Project would result in potentially significant impacts in the following categories: Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, Public Services and Recreation, Tribal Cultural Resources, and Utilities and Service Systems. As described in this EIR, through mitigation measures or compliance with pertinent laws and regulations, the potentially significant impacts are reduced to a less than significant level. The remaining environmental topics, Aesthetics, Agriculture and Forestry Resources, Energy, Hydrology and Water Quality, Land Use, Mineral Resources, Population and Housing, Transportation, and Wildfire would result in less than significant impacts and would not require mitigation.

5.3 <u>ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING AND PROJECT PLANNING PROCESS</u>

5.3.1 ALTERNATIVE LOCATION

As stated in Section 15126.6(f)(2) of the State CEQA Guidelines, the first step in the alternatives analysis is to determine whether any of the significant effects of the Project would be avoided or substantially lessened by putting the Project in another location. Only locations that would avoid or substantially lessen the Project's significant effects need be considered for inclusion in the EIR. Section 15126.6(f)(3) further states that "an EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative".

The construction of a new correctional facility generally presents substantive land use compatibility concerns. While there are extensive areas of vacant land outside the central core of the City that would preclude these concerns, the Bureau of Land Management (BLM) owns scattered parcels in the City and surrounding area. Also, many of these lands are planned for residential development and most of the other areas contain sensitive biological resources, similar to the Project site. In addition, CoreCivic does not own other land in the City that may be utilized as an alternative location for the Project. Since there is no reasonable assurance that CoreCivic can purchase an alternative site in the City, this alternative was considered infeasible and the analysis of impacts at any alternative site would be speculative.

Development of the proposed Project on an alternative site was not carried forward for detailed consideration due to the lack of available alternate sites and inability to meet many of the objectives established for the proposed Project. It was eliminated from further consideration due to infeasibility and its failure to meet the qualification for consideration in an alternatives analysis that the alternative must be less environmentally impactful than the proposed Project. Specifically, development of a correctional facility on another similar-sized undeveloped site in the City would

result in the same impacts related to air quality and is likely to be on a site with the same sensitive biological resources as the Project site. Thus, it would not reduce or avoid the significant unavoidable impacts of the Project. This Alternative has been eliminated from further consideration.

5.3.2 1,512 BED CORRECTIONAL FACILITY ON 216.5 ACRES

A less intensive correctional facility on the Project site would result in the construction of a 1,512-bed facility on the same 216.5-acre site. Since the Project is proposed as a one-story facility, this alternative would mean larger floor areas for each building and amenity, wider setbacks and outdoor areas, and/or scattered smaller buildings for individual uses. The larger sized facility with fewer inmates would require a higher ratio of employees to inmates to provide adequate security and maintenance and may provide operational inefficiencies due to the scattered locations of facilities. This alternative would meet all the Project objectives but to a lesser degree since it would accommodate fewer inmates. Since it would disturb the same area as the Project, the environmental impacts would remain the same with the exception of traffic as fewer beds would generate less traffic. However, Project traffic impacts would be less than significant and do not require mitigation. Therefore, this alternative does not offer any environmental advantage on biological resources. This alternative has been dismissed from further consideration.

5.4 <u>ALTERNATIVES FOR ANALYSIS</u>

In accordance with Section 15126.6(a) of the State CEQA Guidelines, the discussion in this section of the EIR focuses on a reasonable range of alternatives. Other than the "No Project" alternative(s), which are required by CEQA, each alternative must be capable of avoiding or substantially lessening potentially significant effects of the proposed Project. Qualifying alternatives can be considered even if the alternatives would impede to some degree the attainment of the Project objectives or would be more costly.

The following alternatives are analyzed in this section of the EIR:

- Alternative 1 No Project
- Alternative 2 3,024-bed Correctional Facility on 108 acres
- Alternative 3 1,512-bed Correctional Facility on 108 acres
- Alternative 4 Alternative Gas Line Route

In accordance with Section 15126.6(a) of the State CEQA Guidelines, the EIR provides a comparison of the environmental effects and their merits and/or disadvantages of each alternative in relation to the proposed Project. The comparison of impacts between each alternative and the Project assumes that the following would also be implemented to each of the alternatives, where appropriate: (1) construction and maintenance of needed off-site utility improvements and facility upgrades; (2) compliance with relevant Regulatory Requirements (RRs); and (3) implementation of the Mitigation Measures (MMs) identified in Section 4.0, Environmental Analysis, of this EIR.

A comparison of each alternative's ability to achieve the Project Objectives is also evaluated. The level of environmental impact and ability to meet Project Objectives is also considered as part of the identification of the environmentally superior alternative, which is discussed in Section 5.5 of this EIR.

The existing environmental setting of the site would be the same for the proposed Project and alternatives. Additionally, unless specifically identified, it is assumed that the Mitigation Program identified for the proposed Project would also be applicable for the alternatives.

5.4.1 ALTERNATIVE 1: NO PROJECT

Section 15126.6(e) of the State CEQA Guidelines requires that an EIR evaluate a "No Project" alternative in order to allow decision makers to compare the impacts of approving the proposed Project with the impacts of not approving the Project. Section 15126.6(e)(2) of the CEQA Guidelines specifies that the "No Project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, 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 available infrastructure and community services".

The CEQA Guidelines goes on to define two possible methods of analyzing the No Project alternative. CEQA Guidelines Section 15126.6(e)(3)(A), states that if the project is the revisions of an existing land use or regulatory plan, policy, or ongoing operation, the analysis should assume the continuation of the existing plan, policy, or operation into the future.

The proposed Project, as defined in Section 3.0, Project Description, of this EIR, does not include any changes to the existing land use plan or policy. The Project would be located on the parcel adjacent to the east of the existing California City Correctional Center (CCCC). While the Project would be consistent with the existing and abutting CCCC, it would change the land use on 216.5-acre undeveloped parcel. Since the site is undeveloped, the requirement to analyze the continuation of the current "ongoing operation" of the Project site as required in CEQA Guidelines Section 15126.6(e)(3)(A), is the same as the No Project Alternative and no additional analysis is necessary.

Under Alternative 1, no construction activities would occur on the site and no changes to the existing conditions at the Project site would occur. Under this Alternative, the site would remain undeveloped. While this Alternative assumes no development, it does not preclude future use of the site with an allowable land use, as permitted under its General Plan and zoning designations. While the existing zoning allows for residential land uses, the site is located approximately five miles from the City's core developed area. Existing abundant similarly-zoned land that is available along the City's developed edge that could likely be developed at much less expense and would not require extending major utilities approximately five miles to serve the site. In addition, land uses adjacent to the similarly-zoned land is more compatible than an existing correctional facility. For these reasons, development of the Project site with a use compliant with the Zoning designations is not an action that would be reasonably expected to occur in the foreseeable future.

The environmental impacts associated with Alternative 1 are discussed below, along with a comparison of this Alternative's impacts to the impacts of the proposed Project.

Comparative Analysis of Environmental Impacts

Aesthetics

Alternative 1 would have no impacts on a scenic vista or a State scenic highway, as there are no scenic vistas or designated scenic highways in the vicinity of the project site. The project site is currently undeveloped. Alternative 1 would not result in any construction activities or new development on the site. In the absence of construction activities and new development, no changes to the visual environment would occur and none of the potential aesthetics impacts associated with the Project would occur. Additionally, as there would be no new development on the site, no additional sources of light and glare would be created. No aesthetic impact would occur under this alternative since there would be no change to existing conditions. This Alternative

would have no impacts related to aesthetics and its impacts would be less as compared to the proposed Project.

Agriculture and Forestry Resources

There are no lands in the City that are designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance. Likewise, the City does not have a zoning district for forestry land or timberland and no forestry lands exist in or near the City. Therefore, as with the proposed Project, Alternative 1 would have no impacts to agriculture and forestry resources since none exist in the City and the Project site would remain undeveloped. Since there are no agriculture and forestry resources on or near the site, both this Alternative and the proposed Project would have no impact.

Air Quality

Alternative 1 would not involve the generation of pollutant emissions from construction activities and no air quality impacts would occur since no vehicle trips would be generated and no stationary sources of emissions would be introduced to the site. This Alternative would have no Air Quality impacts and its impacts would be less than the impacts of the Project.

Biological Resources

Under Alternative 1, the Project site would remain its existing natural undeveloped condition. No biological resource impacts (related to sensitive species, natural communities, riparian resources, wildlife corridors, and tree preservation) would occur under this alternative since there would be no change to existing conditions. Therefore, the biological resource impacts of this alternative would be less than those of the proposed Project. However, with implementation of the mitigation measures in Section 4.4, Biological Resources, the proposed Project would have a less than significant impact on sensitive biological resources.

Cultural Resources

In the absence of any construction activities on the site, Alternative 1 would not result in the potential for impacts to unknown archaeological resources and human remains that may be encountered during grading activities of the proposed Project. However, the Project impacts are considered less than significant with implementation of the mitigation measures. No cultural resource impacts would occur under this alternative since there would be no change to existing conditions. Therefore, the cultural resource impacts of this alternative would be less than those of the proposed Project. While the proposed Project would have a less than significant impact on sensitive cultural resources, implementation of the regulatory requirement and mitigation measures in Section 4.5, Cultural Resources, would further ensure that no adverse impacts would occur.

Energy

Alternative 1 would not lead to demands for new energy resources or result in increases in long-term electrical or natural gas consumption or transportation energy use at the Project site. This Alternative would have no Energy impacts and its impacts would be less than the impacts of the Project.

Geology and Soils

Alternative 1 would not involve any construction activities (including grading and excavation) or new development on the Project site. Therefore, potential changes in geology and soils and potential impacts to paleontological resources identified for the proposed Project would not occur under this Alternative. However, the Project impacts are considered less than significant with the proposed mitigation measure in Section 4.6, Geology and Soils. No geology and soils impacts as it relates to an earthquake fault zone, erosion, unstable soils, soil expansion and paleontological resources would occur under this alternative since there would be no construction or operational activities on the site. Therefore, the geology and soils impacts of this alternative would be less than those of the proposed Project.

Greenhouse Gas Emissions

Alternative 1 would not involve any construction activities (including grading and excavation) or new development on the site. In the absence of construction activities, and operation of a new correctional facility (including new traffic generation), this alternative would not generate greenhouse gas emissions or conflict with GHG plans, policies and regulations and would avoid the significant and unavoidable impacts under the proposed Project. No GHG impacts would occur under this alternative since there would be no construction or operational activities on the site. Therefore, the GHG impacts of this alternative would be less than those of the proposed Project.

Hazards and Hazardous Materials

Alternative 1 would not involve the use, transport, disposal, or emission of hazardous materials associated with the proposed Project. The site is not included on a list of hazardous materials sites. The undeveloped site would be left in its current state and no hazardous materials would be introduced, stored or used at the site. While there are no airports or airstrips within two miles of the Project site, this alternative would not introduce any new development or 100-foot-tall light masts as proposed with the Project. Alternative 1 would have no impacts that would result from the Project site being located within a 20,000 square mile area north of Edwards Air Force Base (EAFB) that is designated as the Joint Services Restricted R-2508 Complex. No mitigation related to EAFB would be required with this alternative. However, with implementation of the mitigation measures in Section 4.9, Hazards and Hazardous Materials, the proposed Project would have a less than significant impact on EAFB operations.

No other impacts related to hazards and hazardous materials would occur under this alternative since there would be no construction or operational activities on the site. No impacts related to toxic emissions to nearby schools and interference with adopted response plans or emergency evacuation route would occur. Therefore, the impacts of this alternative related to hazards and hazardous materials would be less than those of the proposed Project.

Hydrology and Water Quality

Alternative 1 would not involve any changes in existing drainage patterns, percolation rates, runoff volumes, or other hydrologic conditions. There would be no increase in impervious surfaces. There would be no sources of urban runoff or increases in storm water pollutants; therefore, no impacts related to water quality would occur. With implementation of the project design feature and regulatory requirement in Section 4.10, Hydrology and Water Quality, the proposed Project would have a less than significant impact related to drainage and storm drain infrastructure. No demand for groundwater resources would occur with Alternative 1. This Alternative would have

no Hydrology and Water Quality impacts and its impacts would be less than the impacts of the Project.

Land Use and Planning

Under Alternative 1, there would be no change in the existing or planned conditions on the site. The site would remain in its current undeveloped state. The City would not be required to issue a Conditional Use Permit, as required by the City's Zoning Regulations for proposed governmental or quasi-governmental correction, probation or prison facilities and services in the RA district. No land use impacts would occur under this alternative since there would be no change to existing conditions; and the land use impacts of this alternative on land use plans and policies and land use compatibility would be less than those of the proposed Project.

Mineral Resources

The Project site and Project vicinity are not known to contain mineral deposits of any economic importance or any otherwise "classified" mineral deposits. With Alternative 1, no development would occur on the Project site and Alternative 1 would have no mineral resource impacts. Since there are no mineral resources on or near the site, this alternative would have the same impacts as the proposed Project.

Noise

Alternative 1 would not involve any grading or construction activities. Therefore, noise associated with construction activities would not occur under this alternative. In addition, as the increase in noise resulting from blasting activities during construction would not occur, there would be no potential impact the existing CCCC located to the west. However, the construction noise impacts associated with blasting during construction of the proposed Project would be mitigated to a level considered less than significant, as discussed in Section 4.13, Noise. No noise impacts (including exceedance of noise standards, groundborne noise and vibration, and permanent or temporary increases in ambient noise levels) would occur under this alternative since there would be no construction or operational activities on the site. Therefore, the noise impacts of this alternative would be less than with the proposed Project.

Population and Housing

Under Alternative 1, no new development would occur within the Project and this alternative would not create any new jobs, nor would it create indirect demand for housing that may increase the resident population of City or surrounding area. It would not indirectly contribute to the economic growth in the City. This alternative would have no impacts to population and housing and its impacts would be less compared to the proposed Project.

Public Services and Recreation

Alternative 1 would not create a demand for public services at the Project site. It would not create new impacts related to fire protection, police protection, school, library services, and parks or recreation. This Alternative would have no Public Services and Recreation impacts and its impacts would be less than the impacts of the Project.

Transportation

Alternative 1 would not generate new vehicle trips and would not involve any changes to the existing roadways, traffic volumes, or operating levels of service near the Project site or in the

City and surrounding area. This Alternative would have no Transportation and Traffic impacts and its impacts would be less than the impacts of the Project.

Tribal Cultural Resources

Alternative 1 would not involve ground disturbance and no impacts would occur to any known or unknown tribal cultural resources. This Alternative would have no Tribal Cultural Resource impacts and its impacts would be less than the impacts of the Project.

Utilities and Service Systems

Alternative 1 would not create demands for utilities and service systems at the Project site. Implementation of this Alternative would not impact existing utility services nor require new water supplies to serve the Project. Also, no off-site utility infrastructure and public facility upgrades would be needed to serve the site. This Alternative would have no Utility and Service System impacts and its impacts would be less than the impacts of the Project.

Wildfire

Alternative 1 would have no impacts on wildfire since the site would remain undeveloped. Since there are no Wildfire on or near the site, this Alternative would have the same impacts as the Project.

Alternative 1 Summary

Alternative 1 would result in no change to the environment and would therefore have no environmental impacts. As there would be no environmental impacts associated with Alternative 1, it would be considered environmentally superior to the proposed Project, as summarized in Table 5-1 below.

TABLE 5-1 SUMMARY OF ALTERNATIVE 1 IMPACTS

Environmental Issue	Potential Significance of Alternative 1 Impacts	Summary of Project Impacts	Compared to Impacts of Project After Mitigation
Aesthetics	No impact	Less Than Significant	Less than Project
Agriculture and Forestry Resources	No impact	No impact	Similar to Project
Air Quality	No impact	Less Than Significant After Mitigation	Less than Project
Biological Resources	No impact	Less Than Significant After Mitigation	Less than Project
Cultural Resources	No impact	Less Than Significant After Mitigation	Less than Project
Energy	No impact	Less Than Significant	Less than Project
Geology and Soils	No impact	Less Than Significant	Less than Project
Greenhouse Gas Emissions	No impact	Less Than Significant	Less than Project
Hazards and Hazardous Materials	No impact	Less Than Significant After Mitigation	Less than Project
Hydrology and Water Quality	No impact	Less Than Significant	Less than Project
Land Use and Planning	No impact	Less Than Significant	Less than Project
Mineral Resources	No impact	No impact	Similar to Project
Noise	No impact	Less Than Significant After Mitigation	Less than Project
Population and Housing	No impact	Less Than Significant	Less than Project
Public Services and Recreation	No impact	Less Than Significant	Less than Project
Transportation	No impact	Less Than Significant	Less than Project
Tribal Cultural Resources	No impact	Less Than Significant After Mitigation	Less than Project
Utilities and Service Systems	No impact	Less Than Significant After Mitigation	Less than Project
Wildfire	No impact	Less Than Significant	Less than Project

Table 5-2 discusses the consistency of Alternative 1 with Project objectives and shows that Alternative 1 would not meet any of the Project objectives.

TABLE 5-2 EVALUATION OF THE PROJECT OBJECTIVES AND ALTERNATIVE 1: NO PROJECT

	Goal/Objective	Consistency Analysis
Goal. To provide a secure correctional facility that meets the needs of potential federal and/or State agencies and provide adequately sized and constructed facilities for housing, administration, food and dining services, medical services, recreation, family visitation, warehouse/utilities, maintenance equipment, and programs such as education, treatment, and/or vocational training.		Not Consistent. The No Project Alternative would not involve the development of a secure correctional facility.
1.	To provide secure facilities that satisfy the standards and requirements of various potential end-users, including but not limited to Federal and State correctional agencies.	Not Consistent. The No Project Alternative would not involve the development of a correctional facility on the site.
2.	To provide facilities that satisfy the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum-, low-, medium-, and high-security.	Not Consistent. The No Project Alternative would not involve the development of a correctional facility to house inmates.
3.	To maximize the opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective detention of inmates by including sufficient space for housing and support facilities within a secured structure and perimeter that allows for efficient surveillance.	Not Consistent. The No Project Alternative would not provide opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective detention of inmates.
4.	To maximize the opportunities for reducing overcrowding in federal and/or State prisons according to the applicable standards for rated capacity.	Not Consistent. The No Project Alternative would not reduce overcrowding at existing facilities.
5.	To develop correctional facilities in an appropriate location that reduces the potential for land use conflicts; minimizes traffic, lighting, and noise impacts to sensitive land uses and urban centers, and avoids environmentally sensitive resources.	Not Consistent. The No Project Alternative would not involve the development of a correctional facility on the site located beside and existing prison.
6.	To provide secure and humane housing of the targeted inmate or detainee populations in facilities that are safe for the inmates, staff and community residents and that address American Correctional Association (ACA) standards for adult male facilities.	Not Consistent. The No Project Alternative would not provide housing for inmates or detainees.

In summary, Alternative 1 would avoid most of the environmental impacts that would occur with the Project, including significant unavoidable impacts related to air quality and biological resources. However, this Alternative would not meet any of the Project objectives.

5.4.2 ALTERNATIVE 2: 3,024-BED CORRECTIONAL FACILITY ON 108 ACRES

Alternative 2 proposes the construction of the same correctional facility as the proposed project on approximately 108 acres (half the land area of the proposed Project). Under Alternative 2, the smaller site would be developed with a more intensive facility, either through the construction of structures with two or more stories or with smaller shared amenities and open space areas. Within the smaller site, a single facility with 3,024 beds would be constructed (instead of two separate

but identical facilities under the proposed Project). Construction activities would be confined to the 108 acres on the western half of the Project site, with the rest of the area remaining undeveloped. With this Alternative, the undeveloped 108 acres of the same parcel would be preserved as open space, which may be located on the northern, eastern and southern portions of the site for the proposed Project. Under this Alternative, land-related impacts would be reduced since no changes to the existing conditions would occur on 108 acres that would remain undeveloped. The environmental impacts associated with Alternative 2 are discussed below, along with a comparison of this Alternative's impacts to the impacts of the proposed Project. It should be noted that all off-site impacts would be the same as with the proposed Project and therefore are not discussed below.

Comparative Analysis of Environmental Impacts

Aesthetics

Alternative 2 would result in changes in visual quality associated with the construction of the CFCC on a smaller site. Like the CFCC, it would likely be a two-story structure but possibly taller given the same number of inmates in a smaller space and would alter the visual characteristics of the site with a higher intensity on the developed portion of the Project site. As with the Project, a limited number of viewers would be exposed to this visual change and there are no public vantage points in the area. Public views of travelers would be passing near the site for a few seconds and would have limited views from Twenty Mule Team Parkway, which is located more than 3,000 feet from the Project site.

New light sources would be introduced at the site which would include security lights, building lights, and parking lot lights. These lights would increase nighttime lighting levels on the site and in the immediate and distant vicinity. As with the Project, passing travelers and OHV users in the surrounding area would only see the increased lighting levels during the nighttime hours and on a temporary basis. However, future residential uses located on the subdivided area to the east would have visibility of proposed lighting. However, as with the Project, it is anticipated there would be a perceived increase in lighting levels as a result of Alternative 2. As with the Project, mitigation would reduce potential light impacts associated with Alternative 2. The impacts related to Aesthetics under Alternative 2 would be less than significant after mitigation. The impacts would be similar the impacts of the Project.

Agriculture and Forestry Resources

Alternative 2 would have no impacts on Agriculture and Forestry Resources since there are no Agriculture and Forestry Resources on or near the smaller site. This Alternative would have the same impacts as the Project.

Air Quality

Under Alternative 2, construction and operational emissions would occur associated with construction of the more intense facility on roughly one-half the acreage of the proposed Project. Assuming the same rate of construction activities would occur for Alternative 2 as would occur for the Project, construction emissions on a daily and annual basis would be the same. Emissions occurring for some of the years of construction for Alternative 2 may also be less than the Project because there would be less developed land and therefore less grading and surface disturbance. The Project was found to result in less than significant air quality impacts from construction activities with the implementation of mitigation measures. Operational emissions from vehicle trips and stationary equipment and activities would be the same since the number of beds proposed would be the same. The impacts related to Air Quality under Alternative 2 would be less than

significant after mitigation; which is the same conclusion reached following mitigation for the impacts of the Project.

Biological Resources

Alternative 2 would disturb existing plant and animal species and their habitats on the 108-acre site but would avoid impacts to biological resources on the remaining approximate108 acres. However, this alternative, similar to the proposed Project, would have potential to impact active nests of migratory birds and/or raptors; however, with implementation of mitigation for the proposed Project, the impacts would be less than significant. As with the proposed Project, this alternative would disturb existing special status plant species and desert native plants on the smaller site, but these native plants would be preserved on the remaining undeveloped portion. Habitats for the desert tortoise, Mohave ground squirrel, burrowing owl, American badger, desert kit fox, and loggerhead shrike would also be lost, similar to the Project, but only on 108 acres. Mitigation associated with sensitive plant and animal species and for impacts to jurisdictional resources would also be required. This Alternative would have less than significant impacts after mitigation but its impacts would be less than the impacts of the Project.

Cultural Resources

Alternative 2 would confine ground disturbance to 108 acres and no impacts would occur to known or unknown historical, archaeological, and paleontological resources on the remaining 108 acres. Mitigation associated with archaeological and paleontological impacts for the proposed Project would also be required under Alternative 2. This Alternative would have less than significant Cultural Resource impacts after mitigation and its impacts would be less than the impacts of the Project.

Energy

Alternative 2 would create a demand for new energy resources and long-term electrical and natural gas consumption and transportation energy use at the smaller site. With the same 3,024 beds as the Project, this Alternative would have less than significant Energy impacts and its impacts would be the same as the impacts of the Project.

Geology and Soils

Alternative 2 would limit ground disturbance to 108 acres but the same number of persons would be exposed to geologic and seismic hazards on the site and in the area. Constructing and operating Alternative 2 in compliance with existing regulations would result in less than significant impacts related to geology and soils. This Alternative would also have less impacts related to Geology and Soils than the Project.

Greenhouse Gas Emissions

Alternative 2 would lead to the construction and operation of a3,024-bed correctional facility on a smaller site and would generate a similar level of GHG emissions. Impacts related to GHG emissions would be less than significant for the Project. Alternative 2 would have approximately the same level of impact related to GHG Emissions as the Project.

Hazards and Hazardous Materials

The proposed Project site is not listed in government databases as past or current hazardous materials user or hazardous waste generator. As with the proposed Project, implementation of

Alternative 2 would include construction and maintenance activities that would use small amounts of hazardous materials or wastes associated with construction vehicles and equipment. on a smaller site. Impacts would be less than significant with construction and operation complying with existing regulations related to the storage, use, disposal, and transport of hazardous materials. This Alternative would include 100-foot tall light masts and possibly structures greater than two stories to accommodate the same number of beds on a smaller project site. As with the proposed Project, Alternative 2 is located within the EAFB Joint Services Restricted R-2508 Complex airspace. Implementation of mitigation (MM HAZ-1 through MM HAZ-3) would result in a less than significant impact on EAFB operations. Like the proposed Project, this alternative would have similar less than significant impacts related to interference with adopted response plans or emergency evacuation routes. The Project site is not located within a Very High Fire Hazard Severity Zone; and Alternative 2 would have similar impacts to the proposed Project's and would be less than significant with mitigation.

Hydrology and Water Quality

Alternative 2 would change existing drainage patterns, percolation rates, runoff volumes, and other hydrologic conditions on 108 acres but would retain existing conditions on the remaining approximate 108 acres. This alternative would result in additional impervious surfaces due to new structures and paved areas that would be constructed on the 108-acre site. However, as with the Project, it is anticipated that changes to the drainage, percolation and runoff volumes would reduce erosion and slope instability due to stormwater directed toward project retention basins. Impacts would be similar to the proposed Project and would be less than significant. As with the proposed Project, no changes in ground percolation and no impact on groundwater recharge would occur with this alternative. Hydrology and water quality impacts would be less than significant with compliance with existing regulations. Since only 108 acres would be disturbed, this Alternative would have less Hydrology and Water Quality impacts than the Project.

Land Use and Planning

Alternative 2 would change the existing land use on 108 acres but would preserve the undeveloped conditions on the remaining approximate 108 acres. This alternative would include boundary setback areas similar to the proposed Project and would not create a land use conflict with the adjacent correctional uses and undeveloped land. This alternative would be developed in compliance with the City's zoning and land use regulations. This Alternative would have less than significant Land Use and Planning impacts and its impacts would be less than the impacts of the Project.

Mineral Resources

Alternative 2 would have no impacts on Mineral Resources since there are no Mineral Resources on or near the site. This alternative would have the same impacts as the Project.

Noise

Alternative 2 would result in construction noise impacts that are of the same intensity as the Project assuming that Alternative 2 would be developed with a similar rate of construction but on a smaller site. Mitigation associated with construction noise would also be required, similar to the Project. With the same number of beds, new vehicle and stationary noise sources would be similar to those of the proposed Project. This Alternative would have less than significant noise impacts after mitigation with the same level of impacts of the Project.

Population and Housing

Alternative 2 would create short-term construction and long-term operational jobs, as well as bring inmate visitors to the Project site. These may lead to an indirect demand for housing that may increase the resident population of City or surrounding areas. This Alternative could indirectly contribute to the economic growth in the City, similar to the Project. Because this Alternative has the same number beds as the Project, this Alternative would have the same less than significant impacts to population and housing impacts as the proposed Project.

Public Services and Recreation

Alternative 2 would create the same demand for public services as the proposed Project due to the same number of proposed inmate beds. This would be the same demand for fire protection and police protection services as the Project. Inmate demand for library services and parks or recreation facilities would be provided on-site, similar to the proposed Project. Impacts to schools would be indirectly generated by the potential for inmate family relocations. As with the proposed Project, impacts to schools would be less than significant. Implementation of mitigation measure MM PS-1 would also apply to this alternative to reduce potential impacts to fire services to less than significant. This alternative would have less than significant impacts to public services and recreation and its impacts would be the same as the impacts of the Project.

Transportation

Alternative 2 would generate the same number of new vehicle trips that would use the same roadways as the proposed Project. As with the Project, this Alternative would not involve any significant changes to the existing roadways, traffic volumes, or operating levels of service near the Project site or in the City and surrounding area. This Alternative would result in the same less than significant impacts to transportation as the proposed Project.

Tribal Cultural Resources

Alternative 2 would confine ground disturbance to 108 acres. Impacts to tribal cultural resources would be highly dependent on their presence on the smaller site or in the area to be preserved as open space. With the smaller disturbance area, the likelihood of uncovering buried tribal cultural resources would be lower. With implementation of the same mitigation as the proposed Project, this Alternative would have less than significant Tribal Cultural Resource impacts. Thus, based on the reduced acreage involved, Alternative 2 impacts would be less than the impacts of the Project.

Utilities and Service Systems

Alternative 2 would create similar demands for utilities and service systems due to the same number of proposed inmate beds. Implementation of this Alternative would require new water supplies and off-site utility infrastructure and public facility upgrades, including a new gas line, similar to the proposed Project. With the implementation of mitigation, this Alternative would result in less than significant impacts to utilities and service systems similar to the proposed Project.

Wildfire

Alternative 2 would change the existing land use on 108 acres but would preserve the undeveloped conditions on the remaining approximate 108 acres. However, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard

Severity, as mapped by CalFire. This Alternative would have less than significant wildfire impacts and its potential impacts would be similar to the impacts of the Project.

Alternative 2 Summary

The proposed CFCC on a smaller site would result in less than significant impacts after mitigation due to the reduction in the land area that would be disturbed by this Alternative. Therefore, Alternative 2 would be considered environmentally superior when compared to the Project, as summarized in Table 5-3 below.

TABLE 5-3
SUMMARY OF ALTERNATIVE 2 IMPACTS

Environmental Issue	Potential Significance of Alternative 2 Impacts	Summary of Project Impacts	Alternative's Comparison to the Project After Mitigation
Aesthetics	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Similar to Project
Agriculture and Forestry Resources	No impact	No impact	Similar to Project
Air Quality	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Similar to Project
Biological Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Cultural Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Energy	Less Than Significant	Less Than Significant	Similar to Project
Geology and Soils	Less Than Significant	Less Than Significant	Less than Project
Greenhouse Gas Emissions	Less Than Significant	Less Than Significant	Similar to Project
Hazards and Hazardous Materials	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Similar to Project
Hydrology and Water Quality	Less Than Significant	Less Than Significant	Less than Project
Land Use and Planning	Less Than Significant	Less Than Significant	Less than Project
Mineral Resources	No impact	No impact	Similar to Project
Noise	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Similar to Project
Population and Housing	Less Than Significant	Less Than Significant	Similar to Project
Public Services and Recreation	Less Than Significant	Less Than Significant	Similar to Project
Transportation	Less Than Significant	Less Than Significant	Similar to Project
Tribal Cultural Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Utilities and Service Systems	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Similar to Project
Wildfire	Less Than Significant	Less Than Significant	Similar to Project

As summarized in Table 5-3 above, Alternative 2 would result in a similar level of demand-driven impacts when compared to the proposed Project, but would have less impacts for environmental issues related to land disturbance due to the smaller site.

This alternative would meet or partially meet the Project objectives, as discussed below in Table 5-4.

TABLE 5-4 EVALUATION OF THE PROJECT OBJECTIVES AND ALTERNATIVE 2: 3,024-BED CORRECTIONAL FACILITY ON 108 ACRES

Goal/Objective	Consistency Analysis
Goal. To provide a secure correctional facility that meets the needs of potential federal and/or State agencies and provide adequately sized and constructed facilities for housing, administration, food and dining services, medical services, recreation, family visitation, warehouse/utilities, maintenance equipment, and programs such as education, treatment, and/or vocational training.	Partially Consistent. Alternative 2 would involve the construction of a 3,024-bed facility. However, with a smaller site, common facilities for food and dining services, medical services, recreation, family visitation and other amenities may have to be shared by the entire inmate population or a two- or multi-story configuration may be required. Alternatively, smaller or fewer facilities or spaces may be provided under Alternative 2.
To provide secure facilities that satisfy the standards and requirements of various potential end-users, including but not limited to Federal and State correctional agencies.	Partially Consistent. Alternative 2 would include the construction of a new correctional development facility. With the smaller site, meeting the requirements of endusers may be more of a challenge and reductions in open space and setback areas within the 108-acre site or alternative configurations would be necessary. If standards and requirements cannot be met, the number of beds under this Alternative would have to be reduced to meet this objective.
To provide facilities that satisfy the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum-, low-, medium-, and high-security.	Partially Consistent. Alternative 2 would include the construction of a new correctional facility but with the smaller site, a two- or multi-story facility would likely be constructed. Also, a reconfiguration of the proposed buildings would be necessary since the provision of a combination of security levels would require facility separations that could preclude shared facilities between different security levels.
 To maximize the opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective detention of inmates by including sufficient space for housing and support facilities within a secured structure and perimeter that allows for efficient surveillance. 	Consistent. The correctional facility under Alternative 2 would provide housing and support facilities within a secured structure and perimeter.
To maximize the opportunities for reducing overcrowding in federal and/or State prisons according to the applicable standards for rated capacity.	Partially Consistent. Alternative 2 involves the development of a new correctional facility to relieve overcrowding at existing facilities. This Alternative would feature a reconfigured facility that meets applicable standards. If standards and requirements cannot be met, the number of beds under this Alternative would have to be reduced to meet this objective.
 To develop correctional facilities in an appropriate location that reduces the potential for land use conflicts; minimizes traffic, lighting, and noise impacts to sensitive land uses and urban centers, and avoids environmentally sensitive resources. 	Consistent. Alternative 2 would locate a new correctional facility adjacent to an existing prison; away from the urban center and sensitive receptors; and would include mitigation for impacts to sensitive biological and cultural resources.
6. To provide secure and humane housing of the targeted inmate or detainee populations in facilities that are safe for the inmates, staff and community residents and that address American Correctional Association (ACA) standards for adult male facilities.	Consistent. Alternative 2 involves the development of a new correctional facility that would meet ACA standards.

In summary, Alternative 2 would reduce impacts to sensitive biological and cultural resources, with the proposed reduction in the land area that would be disturbed and developed with the

correctional facility. However, the same size facility would be constructed, resulting in the same traffic impacts and demands for public services, utilities, and energy. Long-term air quality, GHG emissions and noise impacts would also be the same, as will impacts on aesthetic and hazards due to the more intensive and increased heights of proposed buildings. Additionally, this alternative would result in a revised space allocation for the 108 acre project site that may not meet the needs and/or requirements of the potential end user correctional agencies.

5.4.3 ALTERNATIVE 3: 1,512-BED CORRECTIONAL FACILITY ON 108 ACRES

Alternative 3 proposes the construction of a correctional facility that is half the size (1,512 beds) on half the land area of the proposed Project. Under this Alternative, the western approximate 108 acres of the 216.5-acre site would be developed with a 1,512 bed correctional facility. However, this Alternative does not preclude future development of the undeveloped 108 acres with an allowable land use, as permitted under its General Plan and zoning designations. The environmental impacts associated with Alternative 3 are discussed below, along with a comparison of this Alternative's impacts to the impacts of the proposed Project. It should be noted that all off-site impacts would be the same as with the proposed Project and therefore are not discussed below.

Comparative Analysis of Environmental Impacts

Aesthetics

Alternative 3 would result in changes in visual quality associated with the construction of one correctional facility on 108 acres. As indicated above, the western approximate 108 acres of the 216.5-acre site would be developed with a 1,512 bed correctional facility. As with the Project, a limited number of viewers may be exposed to this visual change and there are no public vantage points in the area. Public views of travelers would be passing near the site for a few seconds and would have limited views from Twenty Mule Team Parkway, which is located more than 3,000 feet from the Project site.

New light sources would be introduced at the site which would include security lights, building lights, and parking lot lights. As with the proposed Project, these lights would increase nighttime lighting levels on the site and in the immediate and more distant vicinity. Additionally, as with the proposed Project, passing travelers and OHV users in the surrounding area would only see the increased lighting levels during the nighttime hours and on a temporary basis. However, future residential uses located on the subdivided area to the east would have visibility of the Alternative and lighting. However, as with the Project, it is anticipated there would be a perceived increase in lighting levels near the CCCC as a result of Alternative 3. Due to the smaller density and land development of Alternative 3, there would be fewer light sources. However, as with the Project, mitigation would reduce potential light impacts associated with Alternative 3. The impacts related to Aesthetics under Alternative 3 would be less than significant after mitigation; and thus the potential impacts of this alternative would be less than the impacts of the Project.

Agriculture and Forestry Resources

Alternative 3 would have no impacts on Agriculture and Forestry Resources since there are no Agriculture and Forestry Resources on or near the smaller site. This Alternative would have the same impacts as the Project.

Air Quality

Under Alternative 3, construction and operational emissions would occur with construction of a smaller facility. With the same site plan as one-half of the proposed project, daily construction related emissions are likely to be the same as those under Phase 1 of the Project but would occur for a shorter time period than both Phases 1 and 2 of the Project so annual emissions are likely to be smaller for some years due to the decreased amount of development. Operational emissions from vehicle trips and stationary equipment and activities would be proportionately halved since the number of beds proposed would be half of the Project. Therefore, the emissions from Alternative 3 would be less than the Project. The impacts related to Air Quality under Alternative 3 would be less than significant after mitigation. Both the Project and Alternative 3 would result in less than significant air quality impacts.

Biological Resources

Alternative 3 would disturb existing plant and animal species and their habitat on the 108-acre site but would avoid impacts to biological resources on the approximate 108 acres that would remain undisturbed. Existing special status plant species and desert native plants would be disturbed on the smaller site but would be preserved on the remaining undeveloped portion. Habitat for the desert tortoise, Mohave ground squirrel, burrowing owl, American badger, desert kit fox, and loggerhead shrike would also be lost, similar to the Project, but only on 108 acres. Mitigation associated with sensitive plant and animal species and for impacts to jurisdictional resources would also be required. As with the proposed Project, this Alternative would result in less than significant impacts and would impact less acreage than the proposed project due to a smaller project site.

Cultural Resources

Alternative 3 would confine ground disturbance to 108 acres and no impacts would occur to known or unknown historical, archaeological, and paleontological resources on the remaining 108 acres. Mitigation associated with archaeological and paleontological impacts for the proposed Project would also be required under Alternative 3. This Alternative would have less than significant Cultural Resource impacts after mitigation and its impacts would be less than the impacts of the Project.

Energy

Alternative 3 would create a demand for new energy resources and long-term electrical and natural gas consumption and transportation energy use. With only 1,512 beds, this Alternative would have less energy impacts than the Project; and like the proposed Project, the energy impacts of this alternative would be less than significant.

Geology and Soils

Alternative 3 would limit ground disturbance to 108 acres and fewer persons would be exposed to geologic and seismic hazards on the site and in the area. With compliance with existing regulations, impacts related to geology and soils would be less than significant. Based on the reduced acreage, this Alternative would have fewer impacts related to Geology and Soils than the Project.

Greenhouse Gas Emissions

Alternative 3 would lead to the construction and operation of a 1,512-bed correctional facility on a smaller site and, thus, would generate less GHG emissions for both the construction and operations phases of this Alternative. Impacts related to GHG emissions would be less than significant. This Alternative would have less impacts related to GHG Emissions than the Project.

Hazards and Hazardous Materials

The proposed Project site is not listed in government databases as past or current hazardous materials user or hazardous waste generator. As with the proposed Project, implementation of Alternative 3 would include construction and maintenance activities that would use small amounts of hazardous materials or wastes associated with construction vehicles and equipment. on a smaller site. Impacts would be less than significant with compliance with existing regulations related to the storage, use, disposal, and transport of hazardous materials. This Alternative would include 100-foot tall light masts. As with the proposed Project, Alternative3 is located within the EAFB Joint Services Restricted R-2508 Complex airspace. As with the proposed Project, implementation of mitigation (MM HAZ-1 through MM HAZ-3) would result in a less than significant impact on EAFB operations. This alternative would have similar less than significant impacts related to interference with adopted response plans or emergency evacuation route. The Project site is not located within a Very High Fire Hazard Severity Zone. Alternative 3 would have similar impacts to the proposed Projects and would be less than significant with mitigation.

Hydrology and Water Quality

Alternative 3 would change existing drainage patterns, percolation rates, runoff volumes, or other hydrologic conditions on 108 acres but would retain existing conditions on the remaining 108 acres. This alternative would result in an increase in impervious surfaces due to new structures and paved areas that would be constructed on the 108-acre site. However, as with the Project, it is anticipated that changes to the drainage, percolation and runoff volumes would reduce erosion and slope instability due to stormwater directed toward project retention basins. Because only half of the Project site would be developed, impacts would be less than the proposed Project and would be less than significant. As with the proposed Project, no changes in ground percolation and no impact on groundwater recharge would occur with this alternative. Hydrology and water quality impacts would be less than significant with compliance with existing regulations. Since only half of the Project site (108 acres) would be disturbed, this alternative would have less hydrology and water quality impacts than the Project.

Land Use and Planning

Alternative 3 would change the existing land use on 108 acres but would preserve the undeveloped conditions on the remaining approximate 108 acres. As with the Project, this Alternative would developed in compliance with the City's zoning and land use regulations. This Alternative would have less than significant Land Use and Planning impacts and its impacts would be less than the impacts of the Project.

Mineral Resources

Alternative 3 would have no impacts on mineral resources since there are no mineral resources on or near the site. This alternative would have the same impacts as the Project.

Noise

Alternative 3 would result in construction noise impacts that would be the same as the construction noise impacts under the Project. Mitigation associated with construction noise would also be required, similar to the Project. With the fewer inmate beds, new vehicle and stationary noise sources for the operations phase would be less than those of the proposed Project. This alternative would have less than significant noise impacts after mitigation and its noise impacts would be less than the impacts of the Project.

Population and Housing

Alternative 3 would create short-term construction and long-term operational jobs, as well as bring inmate visitors to the site. With the smaller facility on a smaller site, fewer construction and permanent jobs would be created; fewer inmates would be housed under this Alternative; and fewer inmate visitors would come to the site. While employees and inmate visitors may lead to an indirect demand for housing that may increase the resident population of City or surrounding area, this demand is not expected to require new housing development. This Alternative could indirectly contribute to the economic growth in the City, although at a reduced rate than that of the Project. This Alternative would have less than significant population and housing impacts and its impacts would be less than those of the proposed Project.

Public Services and Recreation

Alternative 3 would create a demand for public services for the smaller facility. This would be proportionately reduce the demand for fire protection and police protection services of the Project. No demand for schools, library services, and parks or recreation facilities would occur since these facilities would be provided on-site, similar to the proposed Project. Implementation of mitigation measure MM PS-1 would also apply to this alternative to reduce potential fire services impacts to less than significant. This alternative would have less than significant impacts to public services and recreation and its impacts would be less than the impacts of the Project.

Transportation

Alternative 3 would generate new vehicle trips but less than the trip generation of the proposed Project. However, these trips would use the same roadways As with the Project, this Alternative would not involve any significant changes to the existing roadways, traffic volumes, or operating levels of service near the Project site or in the City and surrounding area. Alternative 3 would have less than significant transportation impacts and its impacts would be less than those of the Project.

Tribal Cultural Resources

Alternative 3 would confine ground disturbance to 108 acres. Impacts to tribal cultural resources would be highly dependent on their presence on the smaller site or in the area to remain undeveloped. With the smaller disturbance area, the likelihood of uncovering buried tribal cultural resources would be lower. With the implementation of the same mitigation as the proposed Project, this alternative would have less than significant impacts to tribal cultural resources. Thus, based on the reduced acreage involved, Alternative 3 impacts would be less than the impacts of the Project.

Utilities and Service Systems

As with the proposed Project, Alternative 3 would create new demands for utilities and service systems. With the smaller facility on the smaller site, demand is expected to be proportionately half that of the Project. Implementation of this Alternative would require new water supplies and off-site utility infrastructure and public facility upgrades, but pipe sizes and public facility upgrades may be less than those of the proposed Project. With the implementation of the same mitigation as the proposed Project, Alternative 3 would have less than significant utility and service system impacts and its impacts would be less than those of the Project.

Wildfire

Alternative 3 would change the existing land use on 108 acres but would preserve the undeveloped conditions on the remaining approximate 108 acres. However, neither the Project site nor the City of California City is located within areas identified to have Very High Fire Hazard Severity, as mapped by CalFire. This alternative would have less than significant impacts to wildfire and its impacts would be similar to the proposed Project.

Alternative 3 Summary

As with the proposed Project, Alternative 3 would result in less than significant impacts after mitigation. However, Alternative 3 would result in the construction and operation of a smaller facility on a smaller site and therefore, would be considered environmentally superior when compared to the Project, as summarized in Table 5-5 below. However, as described in Table 5-6, Alternative 3 does not meet or is only partially consistent all of the Project objectives due to the reduced 108 acre site.

TABLE 5-5 SUMMARY OF ALTERNATIVE 3 IMPACTS

Environmental Issue	Potential Significance of Alternative 3 Impacts	Summary of Project Impacts	Alternative's Comparison to the Project After Mitigation
Aesthetics	Less Than Significant	Less Than Significant	Less than Project
Agriculture and Forestry Resources	No impact	No impact	Similar to Project
Air Quality	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Biological Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Cultural Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Energy	Less Than Significant	Less Than Significant	Less than Project
Geology and Soils	Less Than Significant	Less Than Significant	Less than Project
Greenhouse Gas Emissions	Less Than Significant	Less Than Significant	Less than Project
Hazards and Hazardous Materials	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Hydrology and Water Quality	Less Than Significant	Less Than Significant	Less than Project
Land Use and Planning	Less Than Significant	Less Than Significant	Less than Project
Mineral Resources	No impact	No impact	Similar to Project
Noise	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Population and Housing	Less Than Significant	Less Than Significant	Less than Project
Public Services and Recreation	Less Than Significant	Less Than Significant	Less than Project
Transportation	Less Than Significant	Less Than Significant	Less than Project
Tribal Cultural Resources	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Utilities and Service Systems	Less Than Significant After Mitigation	Less Than Significant After Mitigation	Less than Project
Wildfire	Less Than Significant	Less Than Significant	Similar to Project

As summarized in Table 5-5 above, Alternative 3 would result in less environmental impacts when compared to the proposed Project due to the construction and operation of a smaller facility on a smaller site. This alternative would meet or partially meet most of the Project objectives, as discussed below in Table 5-6.

TABLE 5-6 EVALUATION OF THE PROJECT OBJECTIVES AND ALTERNATIVE 3: 1,512-BED CORRECTIONAL FACILITY ON 108 ACRES

	Goal/Objective	Consistency Analysis
the need provide housing medical warehou program	o provide a secure correctional facility that meets do for potential federal and/or State agencies and adequately sized and constructed facilities for administration, food and dining services, services, recreation, family visitation, use/utilities, maintenance equipment, and us such as education, treatment, and/or all training.	Partially Consistent. Alternative 3 would allow for the construction of a 1,512-bed facility on a smaller site. This Alternative would meet the detention needs of potential federal and/or State agencies but may not be large enough to accommodate a larger inmate population, if needed by these agencies.
1.	To provide secure facilities that satisfy the standards and requirements of various potential end-users, including but not limited to Federal and State correctional agencies.	Consistent. Although a smaller facility is proposed, Alternative 3 would include the construction of a new correctional facility that meets the requirements of potential end-users. However, while this alternative would meet the requirements of potential end-users, it would result in fewer beds and overall reduced capacity compared to the Project.
2.	To provide facilities that satisfy the standards and requirements necessary to house inmates at various security levels and a combination of security levels, including but not limited to minimum-, low-, medium-, and high-security.	Not Consistent. Alternative 3 would include the construction of a new correctional facility but with the smaller size and smaller site, the provision of a combination of security levels may not be feasible.
3.	To maximize the opportunities for federal and/or State agencies to rehabilitate inmates, reduce recidivism, and provide safe and effective detention of inmates by including sufficient space for housing and support facilities within a secured structure and perimeter that allows for efficient surveillance.	Consistent. The correctional facility under Alternative 3 would provide housing and support facilities within a secured structure and perimeter.
4.	To maximize the opportunities for reducing overcrowding in federal and/or State prisons according to the applicable standards for rated capacity.	Partially Consistent. Alternative 3 involves the development of a new correctional facility to relieve overcrowding at existing facilities. This Alternative would feature a smaller facility but would meet applicable standards.
5.	To develop correctional facilities in an appropriate location that reduces the potential for land use conflicts; minimizes traffic, lighting, and noise impacts to sensitive land uses and urban centers, and avoids environmentally sensitive resources.	Consistent. Alternative 3 would locate a new correctional facility adjacent to an existing prison; away from the urban center and sensitive receptors; and would include mitigation for impacts to sensitive biological and cultural resources.
6.	To provide secure and humane housing of the targeted inmate or detainee populations in facilities that are safe for the inmates, staff and community residents and that address American Correctional Association (ACA) standards for adult male facilities.	Consistent. Alternative 3 involves the development of a new correctional facility that would meet ACA standards.

As discussed above, Alternative 3 would result in less overall impacts compared to the proposed Project. This Alternative would provide correctional facilities with a decreased capacity of 1,512 beds, half of the Project's proposed 3,024 beds and on half of the Project site. The provision of a smaller facility under Alternative 3 would still provide a correctional facility but would not meet the needs of end-users to the same degree as the Project. With the smaller facility, a combination of security levels may also not be feasible under this Alternative. Since this Alternative does not preclude future development of the remaining 108 acres, it may only be postponing the

environmental impacts associated with development on the remaining approximate 108.5 acres of the site.

5.4.4 ALTERNATIVE 4: ALTERNATIVE GAS LINE ROUTE

As noted in Section 3.0, Project Description, Southern California Gas (SoCalGas) provides natural gas service to the Project area but currently no gas lines exist near the Project site. The Project would include extending natural gas service from a 6-inch diameter gas line at the intersection of Yerba Boulevard and California City Boulevard. As with the proposed Project, the new 6-inch diameter gas line and related equipment (e.g., pressure regulator station) would require new construction within the graded/paved City road right-of-way from Yerba Boulevard east along California City Boulevard. However, instead of being installed the entire distance along California City Boulevard between Yerba and Randsburg Mojave, the alternative gas line route would extend northerly on North Loop Boulevard to Columbine Avenue. At which point, the alternative gas line would connect to an existing SoCalGas line for a distance of approximately 0.8 miles to the intersection of North Loop Boulevard and Hacienda Boulevard. At this intersection, the alternative gas line would include replacement (for upsizing) of roughly 1.5 miles of existing pipe through a developed/paved area to Randsburg-Mojave Boulevard, and would continue to the northeast, as identified for the proposed Project. The alternative gas line route would require approximately 0.8 fewer miles of construction by utilizing existing gas pipe for a portion of the North Loop Boulevard alignment that would result in less construction as compared to the proposed Project. In addition, this alternative provides pressure betterment to gas service for existing residents and other SoCalGas customers in the central area of the City. Refer to Exhibit 5-1 for the location of the alternative gas line route. All other components of the project would be the same as identified with the proposed Project, therefore, the analysis below only focuses on off-site impacts related to the alternative gas line route.

Comparative Analysis of Environmental Impacts

Aesthetics

As with the proposed Project, the alternative gas line route would be located in existing right of way and would result in a temporary construction impact. Views of gas line installation would be short term and not occur on or near scenic vistas or scenic resources. As with the proposed Project, these impacts would be less than significant. The alternative gas line route would require approximately 0.8 miles of less construction due to a shorter route and less construction as compared to the proposed Project; therefore, the alternative gas line route would result in less impacts compared to the proposed Project.

Agriculture and Forestry Resources

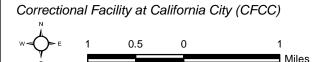
There are no Agriculture and Forestry Resources on or near the Project site or proposed utility alignment route. No impacts to agriculture and forestry resources would occur. This alternative would have the same impacts as the Project.

Air Quality

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles of less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less construction-related air quality impacts compared to the proposed Project. Both the Project's off-site utility and the

Alternative Gas Line Route

Exhibit 5-1



Alternative Gas Line Route would result in less than significant air quality impacts and would not require mitigation.

Biological Resources

As with the proposed Project, the alternative gas line route would be constructed in existing graded and/or paved right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less potential biological resources impacts compared to the proposed Project. Both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant biological resources impacts with implementation of MM BIO-6.

Cultural Resources

As with the proposed Project, the alternative gas line route would be constructed in existing graded and/or paved right of way of existing streets and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance and less potential impacts to cultural resources as compared to the proposed Project. Both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant cultural resources impacts and with implementation of mitigation.

Energy

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction by utilizing a portion of existing pipe along North Loop Road and result in a shorter route compared to the proposed Project; therefore, the alternative gas line route would require less short-term energy usage compared to the proposed Project. However, both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant impacts and would not require mitigation.

Geology and Soils

As with the proposed Project, the alternative gas line route would be constructed in existing graded and/or paved right-of-way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance. This alternative would affect less area compared to the proposed Project but the impacts would be similar. As with the Project, regulatory requirements and mitigation would apply to Alternative 3. Both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant geology and soils impacts with implementation of mitigation.

Greenhouse Gas Emissions

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction by utilizing a portion of existing pipe along North Loop Road and result in a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance. This would generate less construction-related GHG emissions compared to the proposed Project. However, both the

Project's off-site utility and the Alternative Gas Line Route would result in less than significant GHG impacts and would not require mitigation.

Hazards and Hazardous Materials

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance. However, both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant impacts to hazards and hazardous materials and would not require mitigation.

Hydrology and Water Quality

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction by utilizing a portion of existing pipe along North Loop Road and result in a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance. This alternative would affect less area compared to the proposed Project. Both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant impacts to hydrology and water with implementation of a SWPPP (RR HYD-1), which would include BMPs to reduce pollutants in storm water during construction. However, since this alternative would require less construction, this Alternative would have less Hydrology and Water Quality impacts than the Project.

Land Use and Planning

As with the proposed Project, the alternative gas line route would be constructed in existing right of way and would result in a temporary construction impact. The alternative gas line route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project; therefore, the alternative gas line route would result in less ground disturbance. However, construction of the proposed off-site utility lines, including the proposed Project's gas line or the Alternative Gas Line Route would occur in existing public right of way and would not disrupt physical arrangement or any established communities. Both the Project's off-site utility and the Alternative Gas Line Route would result in less than significant impacts and no mitigation is required.

Mineral Resources

There are no mineral resources on or near the Project site or proposed utility alignment route. No impacts to mineral resources would occur. This alternative would have the same impacts as the Project.

Noise

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, construction noise impacts would be to the same level as the noise impacts under the Project. Neither the proposed Project nor the Alternative Gas Line Route would require construction noise mitigation. This Alternative would have similar less than significant construction noise impacts as the proposed Project and mitigation would apply as for the Proposed Project.

Population and Housing

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, there would be no impacts to population and housing as the construction would occur within existing City street right of way and occur on a temporary basis. This Alternative would have similar less than significant population and housing impacts as the proposed Project.

Public Services and Recreation

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, there would be no impacts to public services and recreation, and impacts would be temporary. This Alternative would have similar less than significant public services and recreation impacts as the proposed Project.

Transportation

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, as with the proposed Project, less than significant construction traffic impacts would occur with this alternative. Construction would occur within existing right of way and occur on a temporary basis. This Alternative would have similar less than significant transportation impacts as the proposed Project.

Tribal Cultural Resources

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, as with the proposed Project, the alternative gas line is proposed within existing graded and/or paved City street right of way or and these are not considered tribal cultural resources or sites. In addition, there are no sites on the NRHP, CRHR, or other local register near the proposed alignment. Thus, as with the proposed Project, no impacts to tribal cultural resources are expected with this alternative.

Utilities and Service Systems

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. While this would result in less construction and less temporary impacts, the impact would remain less than significant. This Alternative would have similar less than significant utilities and service systems impacts as the proposed Project.

Wildfire

The Alternative Gas Line Route would require approximately 0.8 miles less construction due to a shorter route compared to the proposed Project. However, neither the Alternative Gas Line Route nor the Project site are located within a Very High Fire Hazard Safety Zone. Therefore, this Alternative would have similar less than significant population and housing impacts as the proposed Project.

Alternative 4 Summary

The Alternative Gas Line Route would not result in any significant impacts and would not require mitigation. This alternative would result in similar less than significant impacts as the proposed Project; however, this alternative would require 0.8 few miles of gas line construction. Therefore, this alternative would result in similar to less impacts compared to the off-site gas line evaluated

as part of the proposed Project. The Alternative Gas Line Route would be considered environmentally superior when compared to the off-site gas line evaluated as part of the proposed Project, as summarized in Table 5-5 below.

TABLE 5-7
SUMMARY OF ALTERNATIVE GAS LINE ROUTE IMPACTS

Environmental Issue	Potential Significance of Alternative Gas Line Route Impacts	Summary of Project Off-Site Impacts	Alternative's Comparison to the Project Off-Site Impacts After Mitigation
Aesthetics	Less Than Significant	Less Than Significant	Similar to Project
Agriculture and Forestry Resources	No impact	No impact	Similar to Project
Air Quality	Less Than Significant	Less Than Significant	Less than Project
Biological Resources	Less Than Significant	Less Than Significant	Less than Project
Cultural Resources	Less Than Significant	Less Than Significant	Less than Project
Energy	Less Than Significant	Less Than Significant	Less than Project
Geology and Soils	Less Than Significant	Less Than Significant	Similar to Project
Greenhouse Gas Emissions	Less Than Significant	Less Than Significant	Similar to Project
Hazards and Hazardous Materials	Less Than Significant	Less Than Significant	Similar to Project
Hydrology and Water Quality	Less Than Significant	Less Than Significant	Less than Project
Land Use and Planning	Less Than Significant	Less Than Significant	Similar to Project
Mineral Resources	No impact	No impact	Similar to Project
Noise	Less Than Significant	Less Than Significant	Similar to Project
Population and Housing	Less Than Significant	Less Than Significant	Similar to Project
Public Services and Recreation	Less Than Significant	Less Than Significant	Similar to Project
Transportation	Less Than Significant	Less Than Significant	Similar to Project
Tribal Cultural Resources	No Impact	No Impact	Similar to Project
Utilities and Service Systems	Less Than Significant	Less Than Significant	Similar to Project
Wildfire	Less Than Significant	Less Than Significant	Similar to Project

5.5 **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the State CEQA Guidelines states that, if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Alternative 1 – No Project would be considered environmentally superior because no changes or improvements to undeveloped Project site that may result in environmental changes would occur. Therefore, existing conditions would not change and no environmental impacts would accompany this Alternative. While Alternative 1 would result in less environmental impacts than the Project on most environmental issues, this alternative would not meet any of the Project's objectives. As such, the EIR must identify an environmentally superior alternative among the other alternatives.

Aside from the No Project Alternative, Alternative 3-1,512-bed Correctional Facility on approximately 108 acres would also be considered environmentally superior. This Alternative would include construction on the western approximate 108 acres adjacent to the existing CCCC. With only 1,512 beds, which is 50 percent of the inmate capacity of the proposed Project, most of the environmental impacts of this Alternative would be less than the impacts of the Project.

This alternative would result in significant impacts; would require the implementation of mitigation measures; and would not result in significant and unavoidable impacts. However, the degree of impacts on most environmental issues would be reduced overall due to the smaller facility on a smaller site.

While Alternative 3 represents the environmentally superior alternative due to the reduced size and smaller site, this Alternative would only be partially consistent with some of the Project objectives and would be inconsistent with one objective. Specifically, the provision of a smaller facility would only partially meet the correctional space needs of potential federal and/or State agencies to the degree of the proposed Project. Also, with the construction of the smaller facility, the provision of a combination of security levels may not be feasible. Since this Alternative does not preclude future development of the remaining 108 acres, it may only be postponing the environmental impacts associated with development on the remaining approximate 108.5 acres of the site.

SECTION 6.0 CEQA MANDATED SECTIONS

6.1 IRREVERSIBLE ENVIRONMENTAL CHANGES

Implementation of the proposed Correctional Facility at California City (CFCC) (also referred to as the Project or the proposed Project) would involve the construction of two identical correctional facilities on a 216.5-acre site in California City. The Project also includes the construction of roadway and utility infrastructure improvements and public facility upgrades needed to serve the Project.

The environmental impacts of the proposed Project are discussed in Sections 4.1 through 4.19 of this Draft EIR. The Project and proposed access road and utility infrastructure and public facility improvements would require the long-term commitment of natural resources. The Project would require the commitment of land resources for development and the upgrade of utility infrastructure and public facilities in the surrounding area.

Over the long term, the Project would require the commitment and use of nonrenewable and slowly renewable resources, including petroleum fuels and natural gas (for vehicle use, construction, lighting, heating, and cooling of structures) and lumber, sand/gravel, steel, copper, lead, and other metals (for use in building construction, roadways, and infrastructure). Other resources that are slow to renew and/or recover from environmental stressors would also be impacted by long-term implementation of the Project (e.g., air quality through the combustion of fossil fuels and the production of greenhouse gases (GHGs), and water supply through water demands for drinking, cooking, cleaning, and general maintenance needs.

Also, changes to the visual characteristics of the site, discovered cultural resources and tribal cultural resources, disturbed/removed biological habitats, and alterations to the local geology and hydrology patterns cannot be reversed. At the same time, impacts related to air pollutant emissions, greenhouse gas emissions, hazardous materials use, land use, traffic generation, noise, public service demands, utility demands, and population and employment increases can only be halted with the abandonment of the Project.

6.2 EFFECTS FOUND TO BE NOT SIGNIFICANT

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that EIRs contain a statement indicating why the potential impacts of a project were determined not to be significant.

As discussed in Section 4.0 of this Draft EIR, implementation of the proposed Project would result in no impacts or less than significant impacts on the following three environmental issues: (1) Agriculture and Forest Resources, (2) Mineral Resources and (3) Wildfire. Due to the lack of agricultural, forest, and mineral resources in and near the Project site and the Project site's location outside of a Very Fire Hazard Safety Zone, no impacts on these issues would occur with implementation of the Project.

Less than significant impacts would occur with the Project, as it relates to the following environmental issues: (1) Aesthetics, (2) Air Quality, (3) Greenhouse Gas Emissions, (4) Land Use and Planning, (5) Population and Housing and (6) Public Services (Police Protection, Schools, Libraries and Parks/Recreation).

Compliance with existing regulations (outlined as regulatory requirements under each environmental issue in Section 4.0) would reduce potential environmental impacts to less than

significant levels on the following environmental issues:, (2) Hydrology and Water Quality, (3) Energy, and (4) Traffic and Transportation.

6.3 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Pursuant to Section 15126.2(a) of the California Environmental Quality Act (CEQA) Guidelines, this Draft Environmental Impact Report (EIR) must identify and focus on the significant environmental effects of the proposed Project. The Project's potentially significant environmental impacts are discussed in detail in Section 4.0 of this EIR. The analyses in Sections 4.1 through 4.19 indicates the Project would result in significant environmental effects prior to mitigation for the following environmental issues: (1) Air Quality, (2) Biological Resources, (3) Cultural Resources, (4) Geology and Soils, (5) Hazards and Hazardous Materials, (6) Noise, (7) Public Services (Fire Protection), (8) Tribal Cultural Resources, and (9) Utilities and Service Systems.

As discussed in Section 4.3, Air Quality, construction activities and operation of the Project would generate pollutant emissions that would contribute to air quality violations in the Mojave Desert Air Basin. MM AIR-1 requires all off-road construction vehicles to comply with USEPA Tier 4 final engine standards which were enacted in 2015. MM AIR-2 requires that application of architectural coatings comply with the 10 gram/liter VOC limit as specified under super compliant coatings. Implementation of MM AIR-1 and MM AIR-2 would reduce construction air quality impacts to less than significant after mitigation.

As discussed in Section 4.4, Biological Resources, construction activities may result in impacts to biological resources. Several common bird species have the potential to nest in the vegetation or on the ground of the Project site and utility alignment. MM BIO-1 addresses the time frame in which construction could occur to avoid active nests and includes a requirement for preconstruction surveys and avoidance of active nests. MM BIO-2 would reduce impacts if any special status plant species are found. Desert native plants protected by the CDNPA are present on the site and implementation of MM BIO-3 would reduce potential impacts to less than significant and ensure compliance with the CDNPA. Implementation of MMs BIO-4 through BIO-8 would reduce impacts to the Crotch bumble bee and desert tortoise, burrowing owl, Mohave ground squirrel, Desert kit fox and American badger to a less than significant level. MM MIO-9 through MM BIO-12 would reduce indirect impacts to biological resources. MM BIO-13 requires procurement of permit/agreement and compliance with the conditions of the permit/agreement to reduce potentially significant impacts to wetlands and riparian communities to less than significant levels. Implementation of MM BIO-1 through MM BIO-13 would reduce biological resources impacts to less than significant after mitigation.

As discussed in Section 4.5, Cultural Resources, grading/excavation associated with construction of the Project would have the potential to disturb any underlying archaeological and paleontological resources. MM CUL-1 calls for a qualified Archaeologist to monitor earth-moving activities during construction. MM CUL-2 requires paleontological monitoring during ground disturbance in sediments more than five feet in depth and when Older alluvial sediments are encountered. MM CUL-1 and MM CUL-2 would reduce the potential for destruction of any archaeological and paleontological resources beneath the site to levels less than significant after mitigation.

As discussed in Section 4.7, Geology and Soils, grading activities may occur as deep as 40 feet below the ground surface, potentially resulting in impacts to Older Alluvial sediments. Therefore, implementation of MM GEO-1 which sets the monitoring procedures and protocols to be followed during project construction, is required. Compliance with MM GEO-1 would reduce potential impacts to paleontological resources to less than significant levels after mitigation.

As discussed in Section, 4.9, Hazards and Hazardous Materials, the site is located within the 20,000-square-mile area north of Edwards Air Force Base (EAFB) that is designated as the Joint Services Restricted R-2508 Complex. This area is restricted to the use of the airspace by military aircraft, with prior approval required for airspace use by civilian aircraft. MM HAZ-1 requires notification and clearance from the Federal Aviation Administration (FAA) and EAFB for the Project. MM HAZ-2 requires proposed exterior light sources to be shielded and directed downward and MM HAZ-3 requires an avigation easement over the site. These MMs would avoid obstructions to aircraft operations over the site. Impacts related to hazards and hazardous materials would be reduced to less than significant levels after mitigation.

As discussed in Section 4.13, Noise, short-term construction activities could exceed the City's maximum noise levels at properties adjacent to the site and along the utility infrastructure corridor and public facility sites where off-site improvements would be constructed as part of the Project. MM NOI-1 includes various measures to reduce noise from construction equipment and activities. With implementation of MM NOI-1, the temporary increase in ambient noise levels due to on-site construction stationary sources would be less than significant after mitigation.

As discussed in Section 4.15, Public Services and Recreation, impacts to fire protection services would be potentially significant. To mitigate the potential effects of the proposed Project on fire protection services, implementation of MM PS-1 would ensure adequate resources to finance the Project's fair share contribution for additional staff and/or equipment needed to meet the City's demand for 911 response services. With implementation of MM PS-1, fire protection service would maintain service ratios, response times, or other performance objectives in compliance with existing published/adopted City standards. Impacts to fire protection would be less than significant after mitigation.

As discussed in Section 4.17, Tribal Cultural Resources, there is a potential for buried tribal cultural resources to be present on the site and at off-site construction areas. Implementation of MM CUL-1, which involves archaeological monitoring during construction activities would allow to the identification of any tribal cultural resources and their evaluation and/or preservation or salvage. Impacts would be less than significant after mitigation.

As discussed in Section 4.18, Utilities and Service Systems, water service to the Project would require the extension of the existing water line in Virginia Boulevard to the site and the provision of an additional pump at the Phase 1 booster pumping station (BPS). Sewer service would require the connection to the existing sewer line at the adjacent CCCC or in Virginia Boulevard, construction of parallel sewer lines in Gordon Boulevard and 145th Street and improvements to the City's wastewater treatment plant (WWTP). MM UTL-1 require the provision of the additional water pump and MM UTL-2 requires payment of the Project's fair share fees for improvement of the WWTP. Implementation of MM UTL-1 and MM UTL-2 would reduce impacts to less than significant levels.

6.4 <u>SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED</u>

Pursuant to Section 15126.2(b) of the CEQA Guidelines, this Draft EIR considers the significant environmental effects which cannot be avoided if the Project is implemented. With implementation of mitigation measures in Section 4.0 of this EIR, Project impacts would be reduced to levels considered less than significant on the following environmental issues: Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, Public Services and Recreation, Transportation and Traffic, Tribal Cultural Resources, and Utilities and Service Systems. All impacts would be reduced to less than significant after mitigation.

6.5 GROWTH-INDUCING IMPACTS

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed Project could foster economic or population growth or the construction of additional development, either directly or indirectly, in the surrounding environment.

"Direct growth" would be induced by the creation of the facilities within the Project boundaries, as well as off-site Project components, which would directly accommodate a new population in the region (e.g., new housing units) or provide employment opportunities that require a new population to locate into the region (e.g., new employment center).

"Indirect growth" would be attributable to and stimulated by a project's construction and/or operation. Indirect growth would be induced by either removing obstacles to population growth (e.g., expanding infrastructure such as utilities and roadways; expanding public services; changes in existing regulations pertaining to land development); and/or stimulating economic activity that attracts a new population.

The CEQA Guidelines state that growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment. If a project is determined to be growth-inducing, then it must be determined if the induced growth would result in significant environmental impacts.

Direct and/or indirect growth would occur if the Project would:

- 1. Create new housing units that would attract a new population into the region
- 2. Create employment opportunities that require a new population to locate into the region
- 3. Remove obstacles to population growth by: (a) expanding infrastructure capacity beyond what is required to serve the Project; (b) expanding public facilities and/or services beyond what is required to serve the Project; and/or (c) changing existing regulations pertaining to land development
- 4. Generate additional demands in the region for goods and services that would result in increased economic activity in the region

The analysis below provides information on whether the Project could be directly or indirectly growth-inducing, and if found to be growth-inducing, whether the growth could contribute to significant changes to the environment beyond the direct consequences associated with construction and operation of the Project.

1. Would the Project create new housing units that would attract a new population into the region?

As discussed in Section 3.0, Project Description, the Project would involve the construction of a correctional development facility to accommodate 3,024 inmates and would not provide housing for the general public. Therefore, the Project would not directly induce residents or households to relocate to the Project or the City.

The Project would not induce growth in the City's or County's inmate population or promote incarceration, but would accommodate individuals determined by the court system to require incarceration. The Project itself would not indirectly induce growth in the inmate population in California City or Kern County.

The Project would prevent overcrowding within the jail system and or the early release of inmates due to the lack of capacity at the Project or other detention facilities. The availability of capacity within the Project would not promote incarceration due to available bed capacity, but would only assist in decreasing overcrowding.

As discussed in Section 4.14, Population and Housing, some families of the inmates could decide to relocate to the surrounding area in order to be closer to the Project for the convenience of regular visitations. However, it is difficult to estimate the actual number of family relocations and the potential for indirect population growth. While specific estimates of family relocations cannot be easily made, relocation data from existing correctional facilities operated by CoreCivic shows that one to two percent of inmate families generally relocate to the surrounding area. This translates to a potential for up to 61 families moving into the City and surrounding area to be near inmates at the Project. If these households have an average of 2.84 persons per household (average household size in the City in 2018), it would bring in 175 new residents to the City.

If these relocating households are realized, then the demand for 61 housing units could be met by the 1,032 vacant housing units in the City as of January 2020 (DOF 2020). Housing demand could also be met by future housing units that could be built on the City's vacant residential-zoned land (108,460 acres) that could accommodate as many as 36,406 dwelling units, as called out in its Housing Element (California City 2015). The addition of new households into the area due to family relocations is not expected to be large enough to substantially affect the availability of housing in the City or necessitate construction of a significant number of new housing. Additionally, existing vacant housing stock exists within the region (Tehachapi, Palmdale, Lancaster, and Ridgecrest). Specifically, as of January 2020, the vacancy rate and available units for each city is as follows: Tehachapi (11.9 percent or 441 units), Palmdale (7.1 percent or 3,347 units), Lancaster (8.6 percent or 4,581 units), and Ridgecrest (8.6 percent or 1,058 units) (DOF 2020). Therefore, any increase in the local population due to family relocations could be accommodated by the existing housing stock in the City or within the region and would not contribute to significant changes to the environment beyond the direct consequences associated with construction and operation of the Project.

2. Would the Project create employment opportunities that require a new population to locate into the region?

As discussed in Section 4.14, Population and Housing, the Project would require both short-term construction jobs and long-term operational jobs that would increase the employment opportunities in the City. Because the Project would create new employment opportunities, it could require a new population to locate into the region, and could be considered growth-inducing.

It is not anticipated that this potential population growth associated with new employment opportunities would contribute to significant changes to the environment beyond the direct consequences associated with construction and operation of the Project. As discussed in Section 4.14, Population and Housing, existing commercial uses in and near the site are expected to meet the short-term and limited demand for goods and services generated by construction crews during the construction phase of the Project. The short-term nature of the construction activity would not be of sufficient duration (24 months for Phase 1 and 18 months for Phase 2) to encourage the households of construction crews to move into the surrounding area. As such, construction activities are not expected to create a demand for housing nor induce housing development due to the short-term nature of employment at the site.

As stated in Section 3.0, Project Description, the Project would be staffed by approximately 500 to 600 full-time equivalent employees or a total of 1,000 to 1,200 individuals, depending on the operating scenario and the occupancy rate. With an unemployment rate of 31.7 percent in the

City and 17.5 percent in the County as of June 2020, new jobs at the Project could be filled by the available unemployed local labor force of 800 persons in the City and the unemployed labor force from other areas in Kern and Los Angeles Counties and surrounding region, based on individual eligibility for the vacant positions. Beneficial impacts on employment would occur in the City and the surrounding region.

With an unemployment rate of 31.7 percent in the City and 17.5 percent in the County as of June 2020, new jobs at the Project could be filled by the available unemployed local labor force of 800 persons in the City and the unemployed labor force from other areas in Kern and Los Angeles Counties and surrounding region, based on individual eligibility for the vacant positions. Beneficial impacts on employment would occur in the City and the surrounding region.

The number of jobs available in the City would increase by 1,200 positions, which would be within the employment projections for Kern County of 115,000 new jobs between 2014 and 2035 and another 47,000 jobs by 2042. The Project would not result in substantial employment growth in the City beyond what Kern COG has projected to occur by 2035 and 2042. Thus, there would be no exceedance of Kern COG's population projections for the City for 2035 and 2042, and no substantial employment growth would occur with the Project.

There are 1,032 vacant housing units in the City as of January 2020 in addition to the undeveloped residential-zoned land in the City. The addition of as many as 1,200 potential new households would not substantially affect the availability of housing in the City or necessitate construction of new housing. Therefore, although the Project's employment opportunities may be growth-inducing, the associated increase in the local population could be accommodated by the existing housing and would not contribute to significant changes to the environment beyond the direct consequences associated with construction and operation of the Project.

Should the combined demand for housing from relocating families and Project employees be greater than the 1,032 vacant housing units, it is expected that this demand would induce the development of housing on approved but undeveloped residential tracts in the City or in the surrounding unincorporated County area.

3. Would the Project remove obstacles to population growth by: (a) expanding infrastructure capacity beyond what is required to serve the Project; (b) expanding public facilities and/or services beyond what is required to serve the Project; and/or (c) changing existing regulations pertaining to land development?

The Project would include the construction of an access road to the site. This road is not expected to be used by other existing or future developments in the area and thus, would not induce new development along the access road. The Project includes utility infrastructure improvements to provide service to the site and upgrades to existing public facilities.

(a) Expanding infrastructure capacity beyond what is required to serve the Project:

On-site infrastructure improvements, including water, wastewater, and storm drain infrastructure, would be sized to only serve the Project and would not be up-sized to serve existing or future land uses that may be located near the site.

The Project's water system would connect to the existing water line in Virginia Boulevard. This service connection would not increase the capacity of the system to serve other developments. The additional pump at the Phase 1 booster pumping station (BPS) would have a 550-gallons per minute (gpm) capacity and would serve the Project and the approved but not yet constructed 2.200 bed correctional center.

The proposed parallel sewer lines on Gordon Boulevard and 145th Street would be sized to only serve the Project. Also, there are existing lines on these streets that have not induce adjacent developments. The provision of an on-site holding tank is also being considered to avoid the need for the parallel lines. Thus, sewer line extensions are not expected to induce growth in the area. The 0.5 MGD of additional treatment and disposal/storage capacity at the WWTP would serve the Project and the approved but not yet constructed 2,200 bed correctional center. Also, the Project would be responsible for its pro-rata share of impacts related to the WWTP improvements based on the anticipated sewage flow of 0.28 MGD.

Thus, while the additional pump and WWTP improvements would also serve the approved but not yet constructed 2,200 bed correctional center, this facility would also be owned by CoreCivic and would not be built until an end-user is secured. Thus, these infrastructure and public facility improvements alone would not induce development of the adjacent approved corrections center/detention center.

The proposed power and telephone line connections would occur near the intersection of Virginia Boulevard and Gordon Boulevard. These service connections would not increase the capacity of the system to serve other developments.

The proposed natural gas lines would likely induce development along the proposed alignment since this would provide natural gas services to the site from the central core of California City. The development costs on vacant lands along Twenty Mule Team Parkway could be reduced due to the availability of natural gas services. Growth-inducing impacts related to the natural gas line extension would occur with the Project.

(b) Expanding public facilities and/or services beyond what is required to serve the Project

As discussed in Section 4.15, Public Services and Recreation, increased demand for fire protection services would occur with the Project. The additional support from the California City Fire Department (CCFD) to respond to and help coordinated the transport of more severely injured or sick inmates to local hospitals or trauma centers would adversely affect the CCFD levels of services in the City. To mitigate the potential effects of the additional CCFD support, the proposed Project will implement MM PS-1 which would ensure adequate resources to finance the Project's fair share contribution for additional staff and/or equipment needed to meet the City's response services. However, this demand for service would not require an expansion of existing facilities. Since no identified deficiencies in existing service levels have been identified by the public service agencies and no new public service facilities are proposed or would be required by the Project, any future changes in public service levels would only be undertaken by each agency to serve incremental increases in service demands in the City, and would not be directly created by the Project so as to induce growth in the surrounding area.

No direct demand for off-site schools, library services, or parks would be generated by the Project, as classrooms, a library and indoor and outdoor recreational facilities would be provided on-site. Indirect demands for schools, library services, and parks from Project employees and inmate households that may relocate into the area are anticipated to be accommodated by existing facilities, as discussed in Section 4.15, Public Services and Recreation.

The Project's incremental need to expand public services through additional equipment and personnel would not have a direct environmental impact. No new CCFD stations, CCPD stations, schools, libraries, or other public facilities are proposed as part of the Project, nor would any be needed to serve the Project. Therefore, the Project would not have an indirect growth-inducing impact with respect to the expansion of public services.

(c) Changing existing regulations pertaining to land development.

No change to existing land use regulations applicable to the site is necessary to implement the Project. Specifically, the Project does not require a General Plan Amendment (associated with a change to the current land use designation) or zone change that may affect compatibility with adjacent land uses. The existing Controlled Development, Public Parks and Recreation and Public Schools land use designation and Residential Agricultural zoning on the majority of the site will remain in place and the Project would be consistent with this designation and zoning subject to a conditional use permit.

4. Would the Project generate additional demands in the region for goods and services that would result in increased economic activity in the region?

Short-term demands for building materials and long-term demands for supplies and services to the Project may stimulate additional economic activity in the region. Construction crews may create a short-term demand for goods and services in the area that may increase economic activity in the City. In the long-term, the new employees and their families may present business opportunities for new shopping, entertainment, construction materials/home improvement, maintenance, commercial service providers, and other non-residential developments. This could encourage new businesses and/or the expansion of existing businesses that address these economic needs of the local population. Therefore, the Project could be indirectly growth-inducing through the additional demands for goods and services in the City and region.

However, the increased demand would not result in substantial growth in the region. As discussed in Section 4.14, Population and Housing, the region has been economically depressed in recent years. With an unemployment rate of 31.7 percent in the City and 17.5 percent in the County as of June 2020, new jobs at the Project could be filled by the available unemployed local labor force of 800 persons in the City and the unemployed labor force from other areas in Kern and Los Angeles Counties and surrounding region, based on individual eligibility for the vacant positions. Beneficial impacts on employment would occur in the City and the surrounding region.

The amount of economic activity generated by the Project's demand for goods and services in the region could help to invigorate the local economy, and may encourage new business ventures or land development projects that could contribute to significant changes to the environment beyond the direct consequences associated with construction and operation of the Project.

The Project itself is not expected to induce the development in vacant areas adjacent to the site. However, vacant lands in the City's central core may develop when the Project was in use, as the presence of employees, inmates and visitors at the Project could influence commercial development in the surrounding area. With new commercial development to provide goods and services to employees and visitors of the Project, increased economic activity would provide an increased tax base for the City. Economic forces (i.e., market demand, available supply, financing, property ownership, cost of construction, local taxes and fees, and return on investment) are likely to be greater factors that would dictate investment and development activities in the surrounding area than the rehabilitation and reuse of an existing detention facility.

The analyses in Sections 4.1 through 4.19 of this EIR include the potential environmental impacts of the Project, along with future growth and development in adjacent areas. As discussed, the Project's cumulative impacts would be less than significant.

The cumulative development in the City and surrounding unincorporated County areas would be subject to review and approval by the City or County with jurisdiction over the individual project site and would include the necessary environmental clearance in accordance with CEQA. This

environmental review process would avoid or reduce potentially significant adverse impacts that may occur from individual project proposals. Development review would also ensure that proposed projects are consistent with adopted land use policies and regulations and do not exceed permitted development densities and intensities. Public utility service providers would also need to determine whether the additional growth associated with individual projects can be accommodated by existing or planned infrastructure improvements and the public service and utility agencies' capabilities to provide their respective services. This review and approval of individual developments by public agencies and service providers would allow for the provision of adequate services and infrastructure to serve future development projects, while ensuring that no land use conflicts are created. Mitigation measures, regulatory requirements, and conditions of approval imposed on individual development projects in the area are expected to avoid or reduce environmental impacts, which may be indirectly induced by the Project.

Therefore, the Project's indirect growth-inducing impacts through inmate family and employee relocations and increased economic activities are not expected to result in significant adverse effects on the environment.

6.6 REFERENCES

- California City, City of. 2015 (November 10). Final Housing Element 2015-2023. California City, CA: City of.
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