CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Turlock North Valley Laboratory Replacement Project

Draft Initial Study

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

February 2021

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Turlock North Valley Laboratory Replacement Project

Draft Initial Study

Prepared for:

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Acronyms and Abbreviations

A	
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AFY	acre feet/year
aggregate	sand and gravel
AHB	Animal Health Branch
AHFSS	Animal Health and Food Safety Services Division
ANSI	American National Standards Institute
APN	assessor's parcel number
AST	above-ground storage tank
ATCM	Airborne Toxic Control Measures
ATP	Active Transportation Plan
B	
B.P.	before present
bgs	below ground surface
BMBL	Biosafety in Microbiological and Biomedical Laboratories
BMP	best management practice
BPS	best performance standards
BSL	biosafety level
BSL-2	biosafety level-2
BTU	a unit of measurement for energy
C	
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAHFS	California Animal Health and Food Safety
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Standards Code
CCIC	Central California Information Center

CCR	California Code of Regulations
CDC	Center for Disease Control
CDFA	California Department of Agriculture
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CDOC	California Department of Conservation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbons
CGS	California Geological Survey
CH_4	methane
City	City of Turlock
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CSUS	California State University, Stanislaus
CWA	Clean Water Act
cy	cubic yards

D

dB	decibel
dBA	a-weighted decibel
DDT	dichlorodiphenyltrichloroethane
DGS	California Department of General Services
Diablo Range	Sierra Nevada to the east, the Tehachapi Mountains, and the Coast Range
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources

E

eBird	eBird.org
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EO	Executive Order
ESA	Environmental Site Assessment

F	
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
ft^2	square feet
FTA	Federal Transit Administration
G	
GEOCON	GEOCON Consultants
GHG	greenhouse gas
GIS	geographic information systems
GMP	gallons per minute
GSA	Groundwater Sustainability Agency
GSF	gross square feet
GWP	global warming potential
H	
HAP	hazardous air pollutant
HCP	Habitat Conservation Plan
HEPA	high efficiency particulate air
HVAC	heating, ventilation, and air conditioning
Hwy	Highway
I	
in/sec	inches per second
IS	initial study
K	
kW	kilowatt
L	
lbs/hour	pounds per hour
L_{den}	day-evening-night noise level
LDL	Larson Davis Laboratories
L_{dn}	energy average of the A weighted sound levels occurring during a 24 hour period
LEED	Leadership in Energy & Environmental Design

L_{eq}	equivalent sound level (the sound energy averaged over a continuous period of time)
L_{max}	maximum instantaneous sound level
LOS	level of service
LRA	Local Responsibility Areas
LUST	leaking underground storage tank

M

MDFS	Milk and Dairy Food Safety Branch
MGD	million gallons per day
MGY	million gallons per year
MMBH	million BTUs per hour
MMT	million metric tons
MMT CO_2e/yr	million metric tons of carbon dioxide equivalents per year
mph	miles per hour
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
MT	metric tons

N

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic Safety Administration
NIH	National Institute of Health
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service

O

O&M HCP	Operation and Maintenance Habitat Conservation Plan
O_3	ground-level ozone
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
ozone precursors	ROG and NO_X

P

PG&E	Pacific Gas and Electric Company

PM	Particulate matter
PM10	particulate matter of aerodynamic radius of 10 micrometers or less
PM2.5	particulate matter of aerodynamic radius of 2.5 micrometers or less
PPV	peak particle velocity
Proposed Project	CDFA Turlock North Valley Laboratory Replacement Project
PTO	Permit to Operate
Pub. Res. Code	Public Resources Code
R	
RCRA	Resource Conservation and Recovery Act of 1976
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
RWQCF	Turlock Regional Water Quality Control Facility
S	
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMGB	California State Mining and Geology Board
SO_2	sulfur dioxide
SOx	Sulfur oxide
SRA	State Responsibility Area
SRWA	Stanislaus Regional Water Authority
ST	short term
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
T	
TAC	toxic air contaminant
TFD	Turlock Fire Department
TID	Turlock Irrigation District
TID Lateral Canal	Turlock Irrigation District's Upper Lateral Number Four Canal
TPD	Turlock Police Department
TUSD	Turlock Unified School District

U

U.C. Davis	University of California, Davis, School of Veterinary Medicine
U.C.R	Uniform Crime Reporting
U.S.	United States of America
UCMP	University of California, Berkeley Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGBC	U.S. Green Building Council
USGS	U.S. Geological Survey
UST	underground storage tank

V

VdB	vibration decibel
VMT	vehicle miles traveled
VOC	volatile organic compound

W

WBWG	Western Bat Working Group
Williamson Act	California Land Conservation Act of 1965
WISP	Westside Industrial Specific Plan
WRCC	Western Regional Climate Center

§	section
°F	degrees Fahrenheit

Chapter 1
INTRODUCTION

The California Department of Food and Agriculture (CDFA), with assistance from the Department of General Services –Real Estate Services Division (DGS), has prepared this Initial Study (IS) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed CDFA Turlock North Valley Laboratory Replacement Project (Proposed Project). The Proposed Project and its location are described in depth in Chapter 2, *Project Description*. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] Section (§) 15000 *et seq.*).

1.1 INTENT AND SCOPE OF THIS DOCUMENT

This IS has been prepared in accordance with CEQA, under which the Proposed Project is evaluated at a project level (CEQA Guidelines § 15378). The CDFA, as the lead agency under CEQA, has determined that the Proposed Project would have the potential to result in significant environmental effects. Accordingly, CDFA will also be preparing an Environmental Impact Report (EIR) for the Proposed Project (CEQA Guidelines § 15064). This IS is an informational document to be used in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project.

The site plans for the Proposed Project included in this IS are conceptual. The CDFA anticipates that the final design for the Proposed Project would include some modifications to these conceptual plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification.

This IS describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project for all resource topics included in Appendix G of the CEQA Guidelines and as detailed in this IS' Chapter 3, Environmental Checklist. If a resource topic has the potential to result in significant environmental impacts, it will be further analyzed in the EIR. Based on the analysis in this IS, the Proposed Project would not result in significant impacts to the resource topics listed below; as such, these resource topics will not be further evaluated in the EIR:

Aesthetics	Public Services
Land Use and Planning	Recreation
Population and Housing	Wildfire

1.2 PUBLIC INVOLVEMENT PROCESS

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines § 15073 and § 15105(b) require that the lead agency designate a period during the IS process when the public and other agencies can provide comments on the potential impacts of the Proposed Project. The CDFA has prepared a Notice of Preparation (NOP) for the Proposed Project. Accordingly, CDFA is now circulating this document for a 40-day public and agency review period (i.e. the scoping period).

To provide input on this project, please send comments to the following contact:

Dakota Smith, Senior Environmental Planner
State of California Department of General Services
Real Estate Services Division, Professional Services
Branch 707 Third Street, 4th Floor
West Sacramento, CA 95605
Email: Dakota.smith@dgs.ca.gov

All comments received via email, drop-off, or delivery before 5:00 p.m. on the date of the close of the review period will be considered in the Draft EIR analysis. Comments submitted via U.S. Postal Service will be considered in the Draft EIR analysis if they are postmarked by 5:00 p.m. on the date of the close of the review period. Upon completion of the Draft EIR, another public review period for the Draft EIR will be conducted and comments from the public and agencies may be submitted during that time.

1.3 ORGANIZATION OF THIS DOCUMENT

This IS contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS, the public involvement process under CEQA, and the organization of and terminology used in this IS.

Chapter 2, *Project Description*, describes the Proposed Project including its purpose and goals, the site where the Proposed Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Proposed Project's anticipated environmental impacts.

Chapter 4, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS.

Chapter 5, *List of Preparers*, provides a list of preparers and reviewers of this IS.

Appendices

Appendix A. Biological Resources Background Information
Appendix B. Noise Monitoring Data and Analysis
Appendix C. Native American Correspondence

1.4 IMPACT TERMINOLOGY

This IS uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of no impact is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered less than significant if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered significant or potentially significant if the analysis concludes that a substantial adverse effect on the environment could result or that mitigation measures may be needed to reduce substantial adverse changes in the environment.
- Mitigation refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A cumulative impact refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.

Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

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Chapter 2
PROJECT DESCRIPTION

2.1 BACKGROUND

2.1.1 California Animal Health and Food Safety Mission and Facility Needs

The California Animal Health and Food Safety (CAHFS) laboratory system is operated through an interagency agreement between the California Department of Food and Agriculture (CDFA) and the University of California, Davis, School of Veterinary Medicine (UC Davis) and provides necropsy and laboratory support for California's livestock and poultry producers. CAHFS' mission is to safeguard public health and California's agricultural industry with rapid and reliable diagnoses for animal diseases in livestock herds and poultry flocks, including those that can affect humans. CAHFS operates in partnership with CDFA, UC Davis, veterinarians and livestock and poultry producers to protect animal health and performance, public health and the food supply. Livestock and poultry producers can utilize a variety of testing and diagnostic services offered by CAHFS laboratories to manage the health of their animals. The current CAHFS laboratory network consists of four facilities located at UC Davis and within the cities of Turlock, Tulare, and San Bernardino. The laboratory network serves as a critical early warning system to rapidly detect disease outbreaks so CDFA can contain them before they spread, mitigating potentially devastating impacts to producers and the economy, and protecting human and animal health.

The existing CAHFS Turlock laboratory facility is aging and has space limitations that limit the laboratory to accepting only avian species. To better serve local mammalian livestock producers in the northern San Joaquin Valley Region, CAHFS and CDFA are seeking to replace the existing Turlock laboratory with a new full-service laboratory, office, and necropsy facility to provide comprehensive services related to animal health and performance, public health, and food safety in the northern San Joaquin Valley region.

2.1.2 California Department of Food and Agriculture Mission and Facility Needs

CDFA's mission is to serve the citizens of California by promoting and protecting a safe, healthy food supply, and enhancing local and global agricultural trade, through efficient management, innovation and sound science, with a commitment to environmental stewardship. To this end, CDFA's Animal Health and Food Safety Services Division (AHFSS or division) has multiple office locations throughout the State dedicated to protecting public and animal health to ensure the

safety, availability and affordability of California's agricultural products. AHFSS protects: the safety and security of meat, poultry, dairy products and other foods of animal origin; public and animal health through the prevention, detection, and eradication of livestock and poultry diseases and dairy contamination incidents; and cattle owners against loss of animals from theft, straying or misappropriation through ongoing inspections and investigative services.

The replacement CAHFS Turlock laboratory building will contain additional office and storage space to allow for the relocation of AHFSS staff from leased facilities at different locales to the new State-owned facility. This consolidation of resources into one, permanent location will remedy issues with existing leased space, provide cost savings to the State, and allow for opportunities for increased collaboration amongst AHFSS staff, as well as CAHFS. CDFA plans to relocate staff from offices in Modesto and Stockton who are responsible for livestock health and dairy product food safety and testing to the new facility.

2.2 PROJECT NEED AND OBJECTIVES

In order to improve veterinary diagnostic service and disease surveillance in the Northern San Joaquin region, and consolidate State resources to better protect and promote California's agricultural industry, the current CAHFS laboratory located at 1550 N. Soderquist Road in Turlock, California must be replaced. The existing facility was constructed in 1958 and cannot support CDFA and CAHFS' current programmatic and operational needs, particularly related to mammalian pathology and necropsy. The building's age and size limitations prevent the laboratory from providing needed services to the surrounding area's many mammalian producers, including local beef and dairy producers. In addition, the existing Turlock laboratory is surrounded by residential and other urban land uses that prevent an expansion of the existing facility. Due to the age, design, and space constraints of the existing facility, upgrading the existing facility to meet the needs of CDFA and CAHFS is not feasible.

The CDFA's proposed Turlock North Valley Laboratory Replacement Project (Proposed Project) will relocate the existing CAHFS Turlock Laboratory to a new site and facility with adequate space for necropsy, laboratory, and office functions to provide full services to the livestock and poultry farmers in the region, and consolidate two AHFSS field offices to a central location. The Proposed Project will provide adequate workspace, equipment storage, and vehicle parking for the employees assigned to this office, approximately 44 current employees, increasing to 59 total employees in the future.

Specific project objectives are as follows:

- Replace and relocate outdated and fragmented facilities with modern necropsy, laboratory, and office facilities and support functions on one campus that will maximize efficiencies while maintaining the safety requirements for facilities operating at biosafety level-2 (BSL-2);

- Provide improved client (i.e., local livestock and avian providers) access to veterinary diagnostic services in a relatively underserved area;
- Increase animal disease surveillance capability;
- Provide enhanced identification of potential diseases occurring in mammalian species such as beef and dairy cattle, sheep, goats, horses, and pigs in this livestock-dense region of commercial operations, small farms and ranches, and backyard animal raisers;
- Develop sufficient space and appropriate infrastructure to meet the current and evolving threats to public and animal health, such as emerging diseases, bioterrorism and food safety;
- Incorporate advanced diagnostic technologies and equipment to meet the demand of local clients for state-of-the-art testing services;
- Improve biosecurity measures to protect employees and prevent the spread of disease agents from the laboratory; and
- Implement the joint mission of harmonizing animal disease and food safety inspection and monitoring capacity for AHFSS staff allowing for efficient emergency preparedness planning and response in a part of the state that is rich in animal agriculture.

2.3 PROJECT LOCATION AND SETTING

The Proposed Project site is located at 830 Dianne Drive which is at the northeast corner of Dianne Drive and West Canal Drive in the City of Turlock, California (see **Figure 2-1**). This location is situated directly west of State Route (Hwy) 99. As shown in Figure 2-1, the Proposed Project site is located approximately 0.77 miles southwest of the existing CDFA Turlock Laboratory. The site is comprised of an approximate 7-acre portion of a 27-acre parcel, Assessor Parcel Number 089-021-004-000. The parcel is roughly rectangular in shape and angled to the west/east along the east boundary of the parcel adjacent to Hwy 99. The 7-acre Project site would be located in the parcel's westernmost area, farthest from Hwy 99. Access to the site is available through Dianne Drive, a two-lane road that runs along the west boundary of the parcel. The Turlock Irrigation District (TID) owns and operates an uncovered irrigation canal, Upper Lateral Number Four, located along the southern boundary of the parcel.

The site is currently owned by CDFA as of March 2020. The project site consists of level agricultural row crop land currently designated as Prime Farmland. Land uses immediately adjacent to the site include agricultural land and rural residences. To the east of Hwy 99, the land uses include residential and commercial development. Associated improvements include buried irrigation piping, and outlet structures extending across the site to the north. **Figure 2-2** shows the project site and surrounding area.

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Basemap Sources: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

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0 1

Miles

Figure 2-1
Project Vicinity

T:_Proposal\P19079_CDFA\Fig_2_Aerial_View.mxd PG 1/9/2020

Basemap Sources: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors,

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0 0.45

Miles

Figure 2-2

Aerial View of Proposed Project Area

2.4 PROPOSED PROJECT CHARACTERISTICS

The Proposed Project involves the construction and operation of a replacement CAHFS necropsy, laboratory, and office facility, new CDFA offices, and associated improvements. The preliminary conceptual site plan for the proposed CAHFS Turlock Laboratory is shown in **Figure 2-3**. Note: the site plan shown on Figure 2-3 is preliminary and conceptual; the final design for the Proposed Project may include modifications to this site plan.

The Proposed Project would include a developed area of approximately seven acres (approximately 293,620 square feet [ft^2]) within the approximate 27-acre site. Approximately 214,520 ft^2 (4.9 acres) of this would be impervious surfaces; the remainder of the site would be unpaved and include landscaping and stormwater management elements. The Proposed Project would include the re-surfacing of approximately 27,940 ft^2 of roadway/sidewalks along Dianne Drive adjacent to the Proposed Project site, and development of an access driveway along the north boundary of the Project site (approximately 30,320 ft^2). The total impervious surface area of approximately 4.9 acres includes these roadway- and driveway- related impermeable surface areas, as well as other impervious surfaces related to the proposed structures and paved areas. These area quantities are subject to change pending the final design.

This section continues with a discussion of the Proposed Project facilities, construction activities, and operational activities that would be part of the Proposed Project. The section also includes an outline of proposed changes from the existing CAHFS Turlock Laboratory and the two CDFA branch offices to the extent they are relevant to the environmental analysis.

2.4.1 Project Facilities

The Proposed Project would include a laboratory and office building, a cremator, secured and visitor parking areas, utility improvements, and other ancillary improvements. Descriptions of these facilities follow. Preliminary conceptual locations of Proposed Project facilities are indicated on Figure 2-3.

Structures

The primary facility of the Proposed Project is a laboratory and office building. Additional structures would include a possible cooling tower, a chiller and pump building, hazardous waste/chemical storage area, an equipment shop building, and a truck rinse pit. A general description of this facility is provided below. Details of the site preparation work are provided in Section 2.4.2, Construction.

Necropsy, Laboratory, and Office Building. The necropsy, laboratory, and office building would be a single-story building ranging from approximately 33,500 gross square feet (GSF) up to 41,000 GSF. The facility would be built to meet the California Building Code (2019 CBC, or current version), California Green Code, Title 24 energy and resource standards, and achieve a U.S. Green Building Council (USGBC) Leadership in Energy & Environmental Design (LEED) Silver or higher accreditation. The USGBC grants LEED certification based on a scoring system related to a number of different impact categories such as energy, water, waste, materials, location and transportation. (USGBC 2019).

The building would include the following facilities, some of which are also discussed further below:

- offices and workstations;
- break room/conference rooms;
- laboratory rooms for various laboratory activities including but not limited to diagnostics, pathology, histology, bacteriology services;
- laundry room;
- men's/women's restrooms, locker rooms, and showers;
- lactation room;
- chiller and pump room;
- necropsy suite;
- cremator;
- server, communications, and technology room; and
- janitorial, mechanical, and electrical rooms.

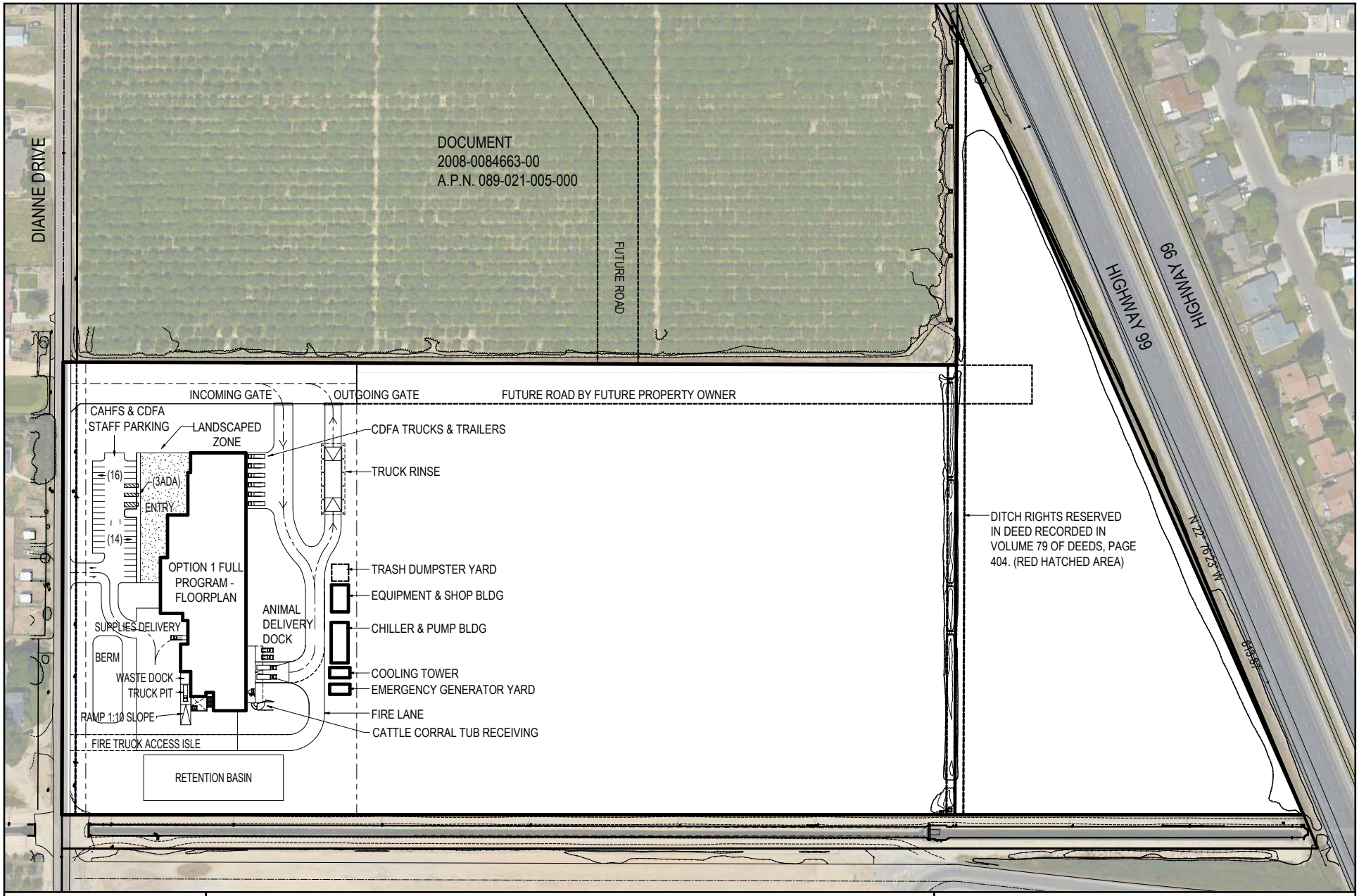

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Figure 2-3
Conceptual Site Plan

Laboratories: Laboratory biosafety ratings vary in degree of building containment and laboratory protocols for human safety for conducting research with particular organisms. The proposed project would provide laboratory space to meet current BSL-2 standards set by National Institutes of Health (NIH)/Center for Disease Control (CDC) in the current edition of the publication Biosafety in Microbiological and Biomedical Laboratories (BMBL). This publication defines four biosafety levels (BSLs), BSL-1 through BSL-4 in ascending order of containment and safety protocol, that apply to biohazardous materials operations and depending on the risk posed by the organism present in the laboratory. Although these biosafety levels were originally intended to protect human health, the CDC Guidelines are widely used to prevent the release of pathogens from laboratories. BSL-2 is appropriate for use with biohazardous materials that are considered to be of ordinary hazard and may produce varying degrees of disease through accidental autoinoculation, ingestion, and skin or mucous membrane exposure. For example, many hospital diagnostic labs are considered BSL-2 facilities. The proposed CAHFS facility would include necropsy and laboratory space designed to federal and University of California BSL-2 safety standards, with office areas isolated from laboratory and animal/sample holding areas and decontamination facilities. Laboratory areas would be organized based on intended function and assumed hazard level, with individual spaces located within a layout that would provide multiple layers of safety measures to prevent cross-contamination or accidental exposure and to limit access to authorized personnel only. Internal security features such as individual door locks and keycard access would be used to limit access to laboratory areas. Laboratory areas would be separated from areas open to the public and from other laboratory personnel who do not work within a particular zone or laboratory function by controlled access zones and decontamination areas. All procedures in which infectious aerosols or spills could be created would be conducted in biosafety cabinets or other forms of primary containment equipment. All waste from the laboratories would be autoclaved or otherwise decontaminated prior to disposal from the facility. All waste would be disposed of in accordance with the Medical Waste Management Act of California, a project-specific Waste Management Plan, and the medical waste permits issued by the County of Stanislaus' Department of Environmental Resources.

Each lab would have a laboratory heating, ventilation, and air conditioning (HVAC) system with single-pass, 100% outside air flow that would not be recirculated into other building spaces, and with negative pressurization relative to adjacent spaces. Under negative pressure, fresh air would be supplied into each laboratory space from the outside environment and be directly exhausted to the outside environment. Negative pressure would be achieved with the exhaust air flow set at a higher rate than the supply air flow rate in the room and adjacent spaces. Consistent with federal guidelines, all windows would be sealed, breakage resistant, and inoperable in order to preserve the air flow balance. The layout of the laboratories would allow potential hazards to be divided into zones based on degree of hazard, with directional air flow moving from less hazardous to more hazardous zones within a space. For example, desk areas for computer use where supply air would enter the space would be considered a less hazardous zone, while a chemical fume hood laboratory where the air would be exhausted from the space would be considered more hazardous. Labs designated as BSL-2E spaces would meet all BSL-2

requirements and include high efficiency particulate air (HEPA)-filtered room exhaust and shower-out capabilities in addition to baseline BSL-2 guidelines.

Cremator: A cremator would be used to dispose of some animal carcass waste as allowed by local regulations. It is anticipated that the cremator would be a vertical cremator located in the basement below the proposed necropsy suite but as the project's design is finalized may be changed to a horizontal cremator located on the building's main level. The cremator would be powered with natural gas. General cremator operations would involve loading animal waste through a hatch, incinerating the waste, emitting gaseous byproducts through a stack during incineration, and the generation and ultimate disposal of ash waste. The cremator system would include, but not be limited to, an incinerator chamber, an ash chamber, an ash cart, and an electronic operating, data and acquisition system. Ash is cooled and will be potentially disposed of using an ash cart with a lift. The cremator's operations, including temperature monitoring, will be controlled automatically through its data and acquisition system. Capacities of the cremator system would accommodate approximately 1,000 pounds per hour (lbs/hour) of material or 1,200 lbs of ash. The cremator system would be approximately 40-50 feet long, 12-15 feet high, and 8-10 feet wide. Temperatures in the cremator would be at or above 1600 degrees. Operations of the cremator may occur for up to 16 hours per day on no more than 237 days per year. Cremator construction and operations would be required to comply with the San Joaquin Valley Air Pollution Control District's (SJVAPCD's) permits, emission limitations, and regulations, as well as any applicable state regulations. Maintenance of the cremator, including cleaning, would be performed in accordance with the manufacturer's regulations and applicable permits.

Hot Water: Hot water would be generated by an electrically-powered boiler with a 1,000-gallon insulated storage tank. Domestic potable hot water would be supplied through a master tempering valve station and circulated at 120 degrees Fahrenheit (°F). A high-temperature hot water system would be circulated at 180 °F to glass washers and laundry areas. There would be two domestic water heaters at 0.1 million BTUs (a unit of measure for energy) per hour (MMBH) each and two laboratory water heaters at 0.5 MMBH each.

Cooling Tower: A cooling tower would be installed primarily to provide a cost-effective and energy efficient operating system for HVAC. The cooling tower would have a maximum circulation rate of approximately 1,000 gallons per minute (GPM) and would not be used for process water.

Chiller and Pump: Chilled water would be provided by approximately two electric chillers located in a potential chiller and pump building. The chiller and pump building would be approximately 1,500 GSF. Chilled water would be piped throughout the building.

Hazardous Waste/Chemical Storage Building: The Proposed Project would include a one-story hazardous waste and chemical storage building. This separate storage area would be approximately 264 GSF and would store two 55-gallon drums of clean Ethanol and two 55-gallon drums of used Ethanol.

Equipment Storage and Shop Building: A one-story equipment storage building would be included to store large equipment and for the repair of equipment. The total size of this building would be approximately 40 feet long by 25 feet deep and 1,000 GSF.

Miscellaneous Site Elements

Truck Rinse Area: A truck rinse area would be used to cleanse vehicles and livestock trailers as needed of any potential contaminants prior to leaving the site. The truck rinse would have pit drains to the sanitary sewer system with an oil and soil separators. Trench drains would be located at the entry and exit ramps to prevent the flow of rainwater into the sewer drains per California regulations. The truck rinse would be an open side structure with roof of approximately 100 feet long by 30 feet wide and 3,000 GSF.

Waste Enclosure: A waste enclosure would be included on the Proposed Project site. The enclosure would contain several trash dumpsters, and recycling bins. The waste enclosure would be approximately 20 feet wide by 15 feet deep and 300 GSF.

Boiler and Electrical Equipment Rooms: The heating and electrical equipment room would be approximately 48 feet wide by 28 feet deep and 1,345 GSF. It is anticipated that there would be three building water boilers at 0.75 MMBH each.

Heating, Ventilation, and Air Conditioning System: The HVAC system would provide fully automated and continuous space heating, ventilation, chemical fume hood and general laboratory exhaust, and cooling to all areas of the necropsy, laboratory, and office building that would be designed for occupancy.

Generator: The generator enclosure would contain an emergency generator, subbase fuel tank, exhaust system, cooling system, engine control systems, and miscellaneous cables and equipment to support the generator's operation. The emergency generator would be diesel-fueled and have a capacity of approximately 500 kilowatts (kW). The generator would have a subbase fuel tank that would have adequate capacity to operate the generator at full load for a minimum of 8 hours. The emergency generator would be weatherproof and sound attenuated. The emergency generator would be used as a power source for the necropsy, laboratory, and office facilities, as necessary, when primary power sources fail. Specifically, the generator would provide backup power for all life safety systems such as the fire alarm system, facility interior lighting, security systems, supply and exhaust air systems, pumps to support building heating and cooling systems, HVAC controls, chemical fume hoods, biosafety cabinets, environmental rooms, and sample refrigerators and freezers in laboratory areas. The facility would also have an uninterruptible power supply unit for electronic equipment. The generator area would be approximately 30 feet long by 15 feet wide and 450 GSF.

Parking Areas

Parking Areas: The Proposed Project would have a parking area for staff and visitors with approximately 70 spaces and a secured parking area for approximately 12 CDFA and CAHFS vehicles, livestock trailers, and equipment. The parking spaces would generally be located adjacent to the front of the building and would be surfaced with asphalt paving.

Ancillary Improvements

Fencing: The Proposed Project site would have a 8-foot high perimeter security fence with access-controlled vehicle gates. The vehicle gates would be set back from Dianne Drive to provide a driveway where a vehicle may wait for the gates to open without queuing on Dianne Drive. The fencing would be a combination block wall (on the south and east sides) and wrought iron fencing (on the north and west sides).

Fire Protection and Hydrants: Fire hydrants would be installed in accordance with the applicable requirements of the California Building Code, California Fire Code, and the City of Turlock Fire Department as the servicing agency. The building would be protected throughout with a hydraulically calculated fire sprinkler systems, which except for special protection needs, would be designed as a water wet-pipe system. All areas of the building would be protected per National Fire Protection Association (NFPA) 13, including electrical rooms, switchgear rooms, transformer rooms, generator rooms, electrical closets, and similar rooms, loading docks, stair towers, exterior canopies, truck wash, and mechanical rooms.

Landscape and Irrigation: Drought-tolerant landscaping requiring minimal maintenance and an automatic irrigation system would be installed on the Proposed Project site. Plants would be selected that are tolerant of the local climate. A 3-to-4-foot-high berm may be created onsite along Dianne Drive to repurpose additional excavated soils from construction activities.

Exterior Lighting: Exterior lighting would be installed throughout the site for security purposes; lighting would be located along the site perimeter and directed downward and shielded to reduce light dispersion. Entrances would have brighter lighting levels than the parking areas and site areas.

Sidewalk and Street Improvements: At present, there are no sidewalks or curbs along Dianne Drive adjacent to the Proposed Project site. Along Dianne Drive, the Proposed Project would include a full upgrade of the east side of Dianne Drive along the full 670-foot length of site frontage including new curbs, gutters, and sidewalks. The Proposed Project would include resurfacing the asphalt pavement in front of the Proposed Project site from the face of the gutter for an approximate width of 32 to 34 feet, approximately half of the road width. Potential entrances into the site from Dianne Drive would be located at least 300 feet north of the centerline of the future extension of West Canal Drive.

In addition to the improvements on Dianne Drive, the Proposed Project would include development of a new access driveway and a fire truck access isle. The access driveway would primarily be used for animal deliveries and CDFA trucks and would extend along the north boundary of the Proposed Project site. The total area of the access driveway would be approximately 76 feet by 399 feet. The fire truck access isle would allow for access by emergency vehicles to the entire project site.

Utilities and Stormwater Drainage

Utilities: Utilities that support the existing site's agricultural irrigation needs would be demolished for the Proposed Project development. Utilities to support the Proposed Project are available and located along Dianne Drive. Specific locations of the points of connection for each utility type are not known at this time but likely connection points are along the west boundary of the Project site and Dianne Drive. Design and construction of utility installation activities is described below and in Section 2.4.2, *Construction*. These areas are analyzed in this IS. All utilities are assumed to be located underground in accordance with the City of Turlock requirements, with the exception of select potential utility options as described below. All utilities would be sited to avoid conflicts with any existing utilities.

Water: A water pipeline would be installed to connect to the existing City water main in Dianne Drive. The water line would extend approximately 100 feet in length to the proposed facility. A reduced pressure backflow preventer will protect the domestic water supply.

Sewer: A sewer pipeline would be installed to connect the Proposed Project site to the existing City of Turlock sewer main located in Dianne Drive. The sewer line would extend approximately 100 feet to the proposed facility.

Gas: Natural gas is anticipated to be a centrally piped and distributed system to serve the cremator as required. Natural gas would be extended to the building from the Pacific Gas and Electric Company (PG&E) natural gas main located in Dianne Drive. It is anticipated that the gas meter would be located at grade at the service entrance to the building. The gas line would extend approximately 100 feet to the proposed facility.

Electrical: New electrical lines would be constructed to provide electricity to the proposed facility. The existing electrical lines are located on existing poles along the west side of Dianne Drive and along the north side of TID Upper Lateral Number Four canal. Electrical service to the project site would be delivered via underground conduit per City of Turlock requirements. The electrical lines would extend approximately 150 feet to the proposed facility.

Phone/Internet/Cable: The existing communication lines are located on poles along the east side of Dianne Drive. Communication service to the project site would be delivered

via underground conduit per City of Turlock requirements. The communication lines would extend approximately 100 feet to the proposed facility.

Stormwater Drainage: Site runoff would be managed and discharged according to the Water Quality Order No. 2013-0001-DWQ, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4). A stormwater retention system would be installed onsite to retain water for an 85th percentile storm. Stormwater runoff would be treated within the right-of-way on Dianne Drive in a landscape strip. The Proposed Project's system may also connect to an existing 60-inch storm drain.

Table 2-1 lists anticipated utility service agencies that would serve the Proposed Project.

Table 2-1. Local Utility Agencies in the Project Area

Utility Service	Utility Agency
Water Supply	City of Turlock
Sanitary Sewer	City of Turlock
Stormwater Management	City of Turlock / State of California
Electrical Service	Turlock Irrigation District
Natural Gas Service	Pacific Gas & Electric Company
Data and Phone Service	AT&T
Fire Protection Service	City of Turlock

2.4.2 Construction

Construction Methods

Site Preparation and Earthwork: Site preparation would include clearing and grubbing, grading, excavation, importing and placing fill, and compacting the fill and other materials. Clearing and grubbing of the site, including the potential removal of all on-site vegetation, would be conducted using bulldozers, standard excavators, and hand labor. All demolished material and debris would be disposed offsite at an appropriate location selected by the construction contractor. For the purposes of this analysis, the disposal site is presumed to be located within 1 hour of travel time from the project site.

To the extent feasible, excavated soil would be reused on site. Excavation would occur at depths ranging from approximately 3-4 feet for the main facility and up to 40 feet for the basement area of the cremator. Excavation would generate approximately 3,800 cubic yards (cy) of fill materials that would be redistributed onsite. No additional fill material is anticipated, any required fill would be generated onsite from the basement excavation. Fill material would

be placed with an excavator and compacted with a compactor/roller. Based on the soil conditions at the site and the area of disturbance for the project site, the total estimated material and/or soil import quantity is estimated to be approximately 2,000 cy for landscaping elements. The anticipated number of potential worker and construction-related trips for the Proposed Project's various construction phases are not yet quantified and will be provided in the EIR.

Buildings and Structures: Construction of buildings and structures would include the following activities:

- Rough grading, site preparation, and excavation for foundation systems and the cremator basement;
- Concrete forming, and placement of rebar for foundations;
- Delivery of concrete for foundations and basement, potentially for concrete tilt-up walls;
- Delivery and erection of structural steel;
- Delivery and installation of mechanical, electrical, plumbing, fire sprinkler, fire alarm and communication systems;
- Delivery and installation of exterior and interior architectural finish systems including laboratory casework and equipment;
- Finish grading and landscape installation.

Pipelines and Underground Utility Equipment: Drainage, water supply, and wastewater pipelines and underground utilities generally would be installed in open trenches using conventional cut-and-cover construction techniques. The first step in the construction process would include surface preparation, including the removal of any structures, pavement, or vegetation from the surface of the trench area using jackhammers, graders, pavement saws, mowing equipment, bulldozers, front-end loaders, and/or trucks. A backhoe, track-mounted excavator, or similar equipment would then be used to dig trenches for pipelines or installation of underground utility equipment. The width of the trench will generally vary between 3 and 6 feet with a depth of approximately three times the pipeline diameter, or deeper. The diameter of pipelines would vary by service flow requirements, material type, and purpose. It is estimated that water, sewer, stormwater, gas, electrical, and phone/internet/cable utility infrastructure trenching would be approximately 100 to 150 linear feet as discussed above.

In most locations, trenches would likely have vertical sidewalls to minimize the amount of soil excavated and the area needed for construction easement. Soil excavated from the trench would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the

trench or for fill at other on-site locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, it may not have the properties necessary for compaction and stability. If not reusable, the soil would be hauled off site for disposal at an appropriate disposal site.

The final step in the installation process would be to restore the ground surface. Site restoration would generally involve paving, installing landscaping, or installing erosion controls, as necessary. This phase would include sidewalk and street resurfacing improvements along the Proposed Project site.

Electrical Utilities Installation: Proposed new electrical connections for the Proposed Project would be installed in open trenches via the techniques described above. These new electrical lines would then be connected to the existing aboveground electrical system infrastructure.

Construction Equipment

The main pieces of equipment that might be used are as follows:

- track-mounted excavator
- medium crane
- end dump truck
- 10-wheel dump truck
- paving equipment
- flat-bed delivery truck
- concrete truck
- grader
- bulldozer
- backhoe
- compactor
- front-end loader
- water truck
- forklift
- compressor/jack hammer
- boom truck
- mowing and weed removal equipment
- generator (temporary)

Construction Fencing

The construction area would be fenced for safety and security.

Decommissioning the Existing Facilities

Prior to occupying the Proposed Project site, CDFA and CAHFS would remove from the existing North Valley Turlock Laboratory site and CDFA offices all manmade material that is unaffixed to the existing sites. The existing laboratory facility would be decommissioned to allow for future use as a State-owned surplus building. If the State determines that there is no other State use for the property, the property would be included in the annual omnibus surplus legislation and, upon enactment, can be sold pursuant to California Government Code Section 11011 *et seq*.

Construction Schedule

Design and construction of the Proposed Project is anticipated to last for approximately 30 months, potentially beginning in 2022 and ending in 2025. Within this timeframe, the construction work that involves the use of operating equipment would be performed within a 22-month period. Construction activities would typically be performed Monday through Friday between 7 a.m. and 5 p.m. After-hours work and work on Saturdays, Sundays, and State holidays would be permitted at the discretion of the State of California.

Design-Build Method

The Proposed Project would be delivered via the design-build method of project delivery. Because this is a design-build project, total improved site development details, which include building elevations, landscaping, access driveway, parking area, and other project specific facilities details are not known at this time and would be determined once the design-build team is selected.

In design-build, a Criteria Architect (or Master Architect) develops performance criteria to establish the building's design characteristics, such as: maximum square footage; design mandates such as solar panels, and the USGBC's LEED certification; facilities required by anticipated building tenants such as sufficient resident and office space and features; and minimum parameters to meet maintenance and functionality requirements.

The analysis in this IS is based on the performance criteria prepared by the Criteria Architect team.

2.4.3 Existing and Proposed Operations

Existing Operations—CAHFS Turlock Laboratory

The existing Turlock laboratory facility at 1550 N. Soderquist Road includes a 1080-ft^2 office and 4200-ft^2 laboratory building with 20 parking spaces, comprising a total of approximately 0.9 acres (approximately 38,600 ft^2). The site does not include an emergency generator. The existing Turlock laboratory currently provides avian necropsy, histopathology, bacteriology, biotechnology, parasitology, and serology testing on site. This facility has 17 employees, and is operated during normal business hours, from 8 a.m. to 5 p.m., Monday through Friday. However, at the discretion of the on-call diagnostician, submissions of samples or animals may be accepted after-hours or on weekends.

Animals and other samples are delivered via United Parcel Service/Federal Express/Golden State courier in addition to walk-in clients. There are approximately 4.2 walk-in submissions per business day or roughly 21 walk-in submissions per week, which are processed onsite or shipped to other CAHFS branch laboratories. Other trips associated with the operations of this facility include weekly trips for waste, linen delivery and pickup, and employee supplies;

quarterly chemical waste pickup; and miscellaneous vendor deliveries/trips are covered under vendor trips below (as samples are mixed in with regular supply deliveries, etc.) and the average above includes client drop-offs for shipping to other branch labs.

Hazardous Materials and Waste

A variety of chemicals and other hazardous materials are needed for the existing Turlock Laboratory's operations and generally include laboratory chemicals, biogenic materials, and industrial grade solvents, cleaners, and other evaporative compounds. Potential chemicals and materials are shown in **Table 2-2**. All hazardous chemicals and materials are stored, handled, transported, and disposed of in accordance with local, State, and federal regulations.

Table 2-2. Hazardous Chemicals and Materials used by the Existing Turlock Laboratory

Hazardous Chemical/Material		
Gram's iodine solution	Malachite Green chloride	Bleach
Potassium hydroxide solution	Iron (III) chloride	Methanol
Hydrogen peroxide	Sodium phosphate dibasic	Acetone
Potassium borohydride	Tris base	Bacdown Detergent Disinfectant
Sodium phosphate monobasic	Carbol-fuchsin solution	Tris-Acetate-EDTA (TAE) buffer solution
Lithium carbonate	Zinc	Agarose
Mineral oil	Lactophenol Blue stain solution	4-Chloro-1-naphthol
10% Buffered Formalin Phosphate	Bouin's solution	Schiff's reagent
Cargille Immersion Oil	Hydrochloric acid	Iodine
Tween 20	Phloxine B	Eosin Y
Methylene blue	Crystal violet	Glycerol
Gelatin	Sodium citrate	Cytoseal 60
Acetic Acid	Formalin solution	Potassium chloride
Hematoxylin Stain Solution, Gill 2 Form	Ethanol	Sodium chloride
Ethidium bromide	Isopropanol	Virkon disinfectant cleaner

Hazardous Chemical/Material		
Voges Proskauer B Reagent	Gram's safranin solution	Gram's crystal violet solution
Gram's decolorizer solution	Cytoseal 60	Proteinase K
Xylenes	Propar	Sulfanilic acid
Nitrate B Reagent	Indole Reagent-Ehrlich's	Kovac's Aldehyde Reagent, for
Fecasol	Carbon dioxide, gas	-----

Cremator Operations

The existing Turlock Laboratory's cremator (Goder Model 69 Pathological Cremator) has a stack of approximately 30 feet high and operates in accordance with SJVAPCD's Permit to Operate (PTO) for the entire facility. Typical operation of the cremator involves one load per day, 5 days a week.

Existing Operations—CDFA Offices

The two CDFA field offices currently operating, which will be relocated under the Proposed Program, perform the following operations as detailed below. **Figure 2-4** provides the locations of these two existing offices as well as the CAHFS Turlock Laboratory.

The Animal Health Branch (AHB) Modesto District Office of the AHFSS is located in a leased property at Stanislaus Co. Ag. Center – Tuolumne Building, 3800 Cornucopia Way, Suite F, Modesto, CA. Operational hours for this site are Monday through Friday, 8 a.m. to 5 p.m. This facility has 14 employees, 12 of whom are field staff who do not commute to the office regularly.

The Stockton Regional Office of the Milk and Dairy Food Safety (MDFS) Branch, AHFSS is located in a leased property at 2403 West Washington Street, Room 10, Stockton, CA 95203. Operational hours for this site are Monday through Friday, 8 a.m. to 5 p.m. This facility has 13 employees, 11 of whom are field staff who do not commute to the office regularly.

Proposed Project Operations

Employees and Vehicle Equipment Use

The Proposed Project facility would be staffed similar to those of the existing CAHFS Turlock Laboratory and two CDFA field offices, with a typical Monday through Friday work schedule. The Proposed Project is projected to have 59 employees comprising 29 CAHFS staff members and 27 CDFA personnel. Field personnel would not commute daily to the office. The average

daily vehicle miles traveled by CDFA field staff during Proposed Project operations would be 111. For non-field CDFA staff from the Stockton MDFS offices, the average and total daily vehicle miles traveled would be 81 and 1,054 miles, respectively, to the Proposed Project site. For non-field staff from the Modesto AHB office, the average and total daily vehicle miles traveled to the Proposed Project site would be similar to existing conditions at 27 and 320 miles, respectively. For staff from the existing CAHFS Turlock Laboratory, the average vehicle miles traveled to and from the new Proposed Project site would be approximately the same as that for the existing Turlock Laboratory due to the proximity of the new site to the existing laboratory site, but would increase incrementally based on the increased number of personnel who would be employed at the new office. **Table 2-3** compares the number of employees associated with the existing and proposed facilities.

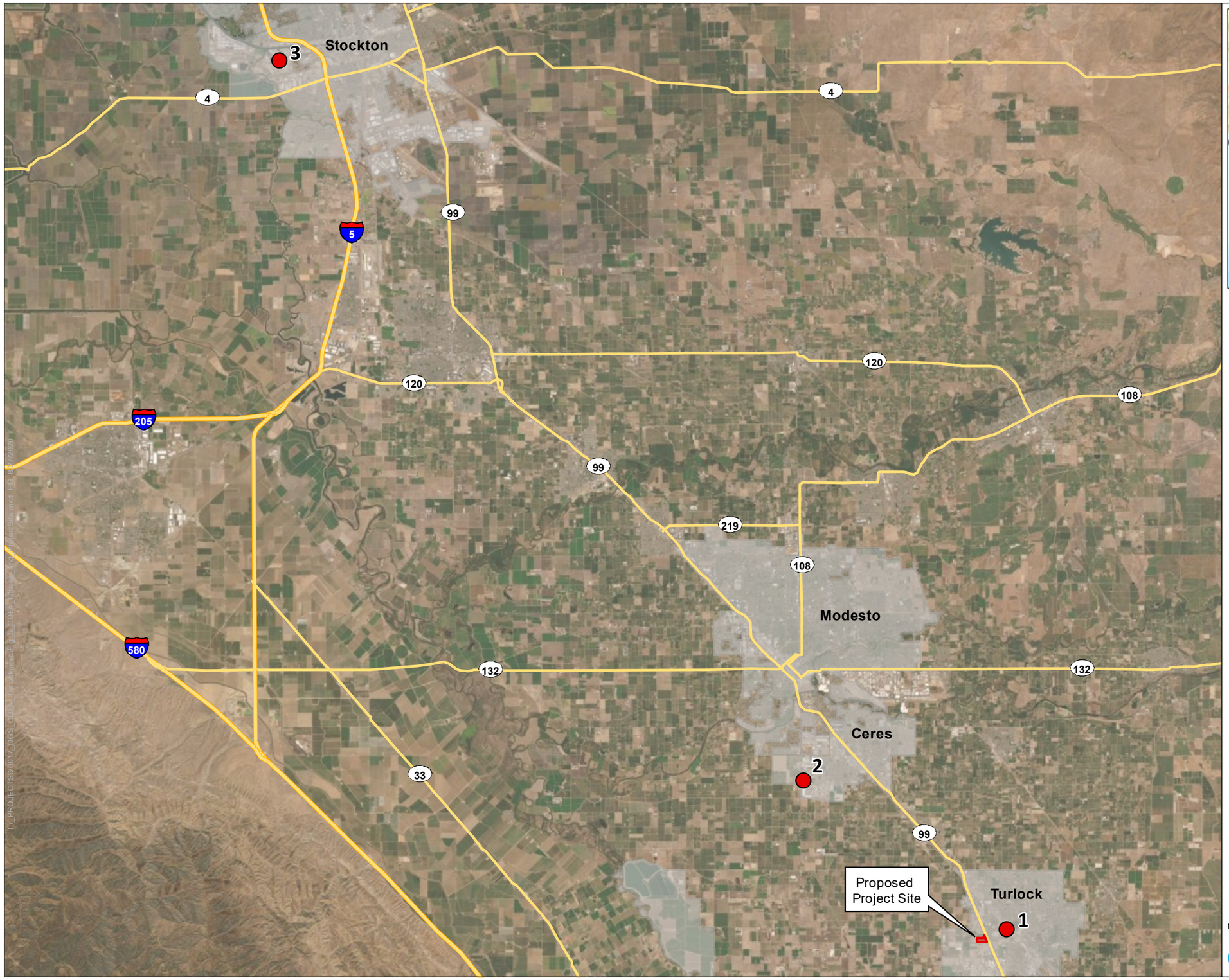
Table 2-3. Comparison of Staffing Levels at Existing Turlock Laboratory, Relevant CDFA Offices and Proposed Turlock North Valley Laboratory

Existing CAHFS or CDFA Office	Existing Staff	Proposed Staff under Proposed Project
CAHFS Turlock Laboratory	17	29
CDFA Animal Health Branch (Modesto)	14	14
CDFA Milk and Dairy Food Safety Branch (Stockton)	13	13
Total Combined Staff	**44**	**59**

Facility Operation

Operation of the Proposed Project would require periodic deliveries of laboratory-related chemicals and cleaning products, office supplies, and other equipment. Hazardous materials stored on site would be transported approximately quarterly to an appropriate local hazardous waste facility for disposal or recycling. In addition, animal carcasses and biogenic samples would be delivered to the facility through walk-in deliveries and/or shipping. It is estimated that the facility will perform necropsies on an annual average of approximately 254 cattle, 124 swine, 83 sheep, 68 goats, and 68 horses. These animals/animal specimens would be delivered to a designated loading dock and immediately processed at the laboratory following the designated protocols in accordance with laboratory BSL-2 safety requirements. Following drop-offs of animal specimens, delivery trucks would use the truck wash prior to exiting the site to decontaminate the vehicle and prevent cross-contamination onto other vehicles entering the site as needed.

Other operations by CDFA staff from the consolidated field offices would continue similar to the existing operations.



Proposed Project Site

Existing CDFA Offices

CDFA Office*

*List of offices:

1. CDFA Turlock Laboratory
2. Modesto District Office (Animal Health Branch)
3. Stockton Regional Office (Milk and Dairy Food Safety Branch)

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Prepared by:

Horizon WATER and ENVIRONMENT

Figure 2-4
CDFA Offices and Project Site

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Permits and Approvals

Because the Proposed Project site is owned by the State, local regulations do not apply to the Proposed Project within the Proposed Project site. Local regulations may apply to off-site activities (e.g., connections to existing infrastructure in the public right of way). The permits and regulatory compliance requirements, along with the responsible or permitting agency, for the Proposed Project are described in **Table 2-4**.

Table 2-4. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
Central Valley Regional Water Quality Control Board	Clean Water Act Section 402 Porter Cologne Water Quality Control Act	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants	Notification under NPDES General Construction Permit Compliance with NPDES Regional Municipal Stormwater Permit
San Joaquin Air Quality Management District	Rules 2010 and 2201	Stationary Source Permits for emergency generator, cremator, chiller	Permit to Construct and Permit to Operate
Pacific Gas and Electric (PG&E)	PG&E Policies and Requirements	Establish compliance with gas company policies	Encroachment permit and gas connection approval
Turlock Irrigation District	TID Policies and Requirements	Establish compliance with company policies Confirm and comply with easement requirements along Upper Lateral Number Four	Encroachment permit and electric connection approval Easement approval and compliance
Stanislaus County, Department of Environmental Resources	Medical Waste Management Act Compliance and Permits	Establish compliance state and county medical waste regulations for use of onsite autoclaves	Medical waste generator permit
City of Turlock	City Policies and Requirements	Potential encroachment into City right-of-way	Encroachment permit, if necessary

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
City of Turlock	New sewer line connection	Establish sewer connections at the Proposed Project site	Conditional Sewer Use and Connection Permit
City of Turlock	City Policies and Requirements	Establish compliance and approval for stormwater system connection	Connection permit for stormwater, if necessary
City of Turlock	City Policies and Requirements	Confirm permits and approvals for road improvements	Coordination with the City and Encroachment permit
City of Turlock	New water supply, and fire hydrants connections	Establish water supply, and fire hydrant connections at the Proposed Project site	Conditional Water Use and Connection Permit, Coordinate with City

Chapter 3
ENVIRONMENTAL CHECKLIST

1.	**Project Title**	CDFA Turlock North Valley Laboratory Replacement Project
2.	**Lead Agency Name and Address**	California Department of Food and Agriculture (CDFA) 1220 N Street Sacramento, CA 95814
3.	**Contact Person, Phone Number and Email**	Department of General Services (DGS) Contact: Dakota Smith, Senior Environmental Planner Dakota.Smith@dgs.ca.gov; (916) 591-1609
4.	**Project Location and Assessor's parcel number (APN)**	830 Dianne Drive, Turlock, California 95380. APN: 089-021-004-000.
5.	**Property Owner(s)**	State of California
6.	**General Plan Designation**	Office
7.	**Zoning**	Office Commercial
8.	**Description of Project**	See Chapter 2, *Project Description*
9.	**Surrounding Land Uses and Setting**	The land where the Proposed Project will occur was purchased for the State of California in March 2020 and is currently undeveloped. Prior to CDFA's purchase, the property was used to grow agricultural row crops. An irrigation pumping/fertilizer facility is located along the southern boundary of the parcel, directly north of Turlock Irrigation District's Upper Lateral Number Four Canal (TID Lateral Canal). Buried irrigation piping and outlet structures extend across the Proposed Project site to the north. Surrounding land uses include an orchard to the north, Highway (Hwy) 99 and a residential subdivision to the east, the TID Lateral Canal and infiltration pond to the south, and Dianne Drive and rural residential and agricultural properties to the west.

10. Other Public Agencies whose Approval or Input May Be Needed	United States (U.S.) Army Corps of Engineers, U.S. Fish and Wildlife Service, State Historic Preservation Officer, State Water Resources Control Board, Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife, San Joaquin Valley Air Pollution Control District.
11. Hazards or Hazardous Materials	The Proposed Project is not located on the Department of Toxic Substances Control (DTSC) lists enumerated under Section 65962.5 of the Government Code, including, but not limited to, lists of hazardous waste facilities.
12. Native American Consultation	No Native American tribes traditionally and culturally affiliated with the project area have requested consultation pursuant to Public Resources Code (Pub. Res. Code) section 21080.3.1 for the Proposed Project.

This chapter of the Initial Study (IS) assesses the environmental impacts of the CDFA Turlock North Valley Laboratory Replacement Project (Proposed Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section (3.1 through 3.20) provides a brief overview of the regulations and regulatory agencies that address the resource and describes the existing environmental conditions for that resource to help the reader understand the conditions that could be affected by the Proposed Project. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be potentially significant or require mitigation measures, those impacts have been identified as needing further evaluation in the Environmental Impact Report (EIR).

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by the Proposed Project, as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☒ Agriculture and Forestry Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☒ Energy
- ☒ Geology/Soils
- ☒ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☒ Hydrology/Water Quality
- ☐ Land Use/Planning
- ☒ Mandatory Findings of Significance
- ☒ Mineral Resources
- ☒ Noise
- ☐ Population/Housing
- ☐ Public Services

- ☐ Recreation
- ☒ Transportation
- ☒ Tribal Cultural Resources
- ☒ Utilities/Service Systems
- ☐ Wildfire

Determination

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

On the basis of this initial evaluation:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kevin Masuhara February 26th, 2021

Signature Date

Name: Kevin Masuhara, Deputy Secretary Administration and Finance
California Department of Food and Agriculture

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3.1 AESTHETICS

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Except as provided in Public Resources Code Section 21099, would the project:			
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒
c. 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?	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐

3.1.1 Environmental Setting

The Proposed Project site is comprised of an approximate 7-acre portion of an approximately 27-acre parcel located at the northeast corner of Dianne Drive and West Canal Drive (see Figure 2-1 in Chapter 2, *Project Description*). The Proposed Project site is flat and consists of agricultural land that is currently fallow and tilled. The only structure on the site is irrigation infrastructure along the southern boundary of the parcel closer to Hwy 99 and adjacent to the TID Lateral Canal.

The parcel is roughly rectangular in shape and angled to the west/east along the east boundary of the parcel adjacent to Hwy 99. The surrounding viewshed along this portion of Hwy 99 consists of clusters of commercial, office and industrial uses; vacant land generally devoid of vegetation; and agricultural parcels.

The proposed laboratory building and associated facilities would be constructed along the westernmost boundary of the parcel that fronts Dianne Drive. **Figure 3.1-1** represents the view of the Proposed Project site by motorists traveling north on Dianne Drive. Areas to the west of Dianne Drive (shown on the left in Figure 3.1-1) include rural residences and associated

outbuildings, such as barns and sheds, as well as fencing of varying heights, colors, and materials. Scattered mature trees are in front of these residences. The eastern side of Dianne Road (shown on the right in Figure 3.1-1) consists of scattered low-growing shrubs, brown dirt, and the tilled agricultural field. Tall, brown wood poles with multiple overhead electrical lines are along both the east and west sides of Dianne Drive. An orchard is present in the background, north of the Proposed Project site.

Figure 3.1-2 provides a view of the Proposed Project site by employees and patrons of local businesses on North Walnut Road looking northwest. West Canal Road is shown in the foreground and this unimproved dirt road provides access for Turlock Irrigation District (TID) staff to the Upper Lateral Number Four. The Proposed Project site is present in the middleground and the background consists of the orchard north of the Proposed Project site.

Overall, the existing forms, colors, and textures in the vicinity of the Proposed Project site are not a visually coherent landscape. The human-made elements—rural residences, fencing, and overhead electrical lines—are the dominant features in the viewshed. A low degree of unity, vividness, and intactness exist; therefore, the overall visual quality is considered to be low.[1]

Scenic Vistas

A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. There are no designated scenic vistas within Turlock (City of Turlock 2012). Turlock's relatively flat topography results in few scenic vistas; views consist mainly of adjacent development or adjacent farmland, orchards, or fields (City of Turlock 2012).

State Scenic Highways

The California Department of Transportation (Caltrans) administers the California Scenic Highways Program. There are no eligible or officially designated California Scenic Highways in the vicinity of the Proposed Project site on the Caltrans California State Scenic Highway Map (Caltrans 2018).

[1] The visual character of a particular landscape is established by the interaction of natural landscape elements and engineered landscape elements. To determine the visual quality of the landscape, the concepts of vividness, intactness, and unity are used (Federal Highway Administration [FHWA] 1988).

Figure 3.1-1. View of the Proposed Project Site by Motorists traveling north on Dianne Drive

Figure 3.1-2. View of the Proposed Project Site by Employees and Patrons of Local Businesses on North Walnut Road looking northwest

3.1.2 Discussion

a. Have a substantial adverse effect on a scenic vista – *No Impact*

There are no designated scenic vistas in Turlock. As discussed further in Criterion c), there are no viewpoints that provide panoramic views of the Proposed Project area. Therefore, the Proposed Project would have no impact on scenic vistas.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway – *No Impact*

As stated above, there are no eligible or officially designated California Scenic Highways in the vicinity of the Proposed Project site (Caltrans 2018). Therefore, the Proposed Project would have no impact on scenic resources within a state scenic highway.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings – *Less than Significant*

Implementation of the Proposed Project would noticeably alter the visual character of the Proposed Project site by constructing a laboratory and office building on vacant agricultural land. Additional structures would include a cooling tower, a chiller and pump building, hazardous waste/chemical storage area, an equipment shop building, and a truck rinse pit (see Figure 2-3 in Chapter 2).

The laboratory and office building would be constructed in the western most portion of the parcel, fronting Dianne Drive. Views of the laboratory and office building by passing motorists on Hwy 99 would be limited due to the flat topography of the Proposed Project area, intervening vacant land, and distance of the laboratory and office building from Hwy 99.

A solid block wall would be constructed along the eastern and southern boundaries of the Proposed Project site, which would screen views of the building from West Canal Drive. The northern and western boundaries of the Proposed Project site would have a 10-foot-high wrought-iron picket perimeter fence. A 3- to 4-foot tall landscaped berm would be created south of the parking lot and in front of the laboratory and office building (Figure 2-3). The berm would partially screen the Proposed Project site from motorists traveling along Dianne Drive. Landscaping would be installed throughout the parking lot and within a “landscape zone” in the northwestern portion of the Proposed Project site which would provide additional screening.

The size and mass of the laboratory and office building would be similar in size and mass of commercial, office, and industrial uses in the surrounding area, including those buildings along North Walnut Road and at the intersection of Dianne Drive and Fulkerth Road. The views of the Proposed Project site for motorists on Dianne Drive are not visually prominent or scenic. Because the overall visual quality of the Proposed Project

site and surrounding area is considered to be low, the Proposed Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings; therefore, this impact would be less than significant.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area – *Less than Significant*

Exterior lighting would be installed throughout the site for security purposes. Lighting along the site perimeter would be shielded and directed downward to reduce light pollution. Light associated with the Proposed Project would be similar to other light sources at commercial, office, and industrial uses in the surrounding area, including those buildings along North Walnut Road and at the intersection of Dianne Drive and Fulkerth Road. The Proposed Project's design is conceptual at this point and will be finalized following completion of the CEQA process. However, the Proposed Project's exterior portions would be designed to minimize glare and may incorporate non-reflective material that would minimize the transmission of glare, such as stucco, non-glazed brick, or masonry. Therefore, the Proposed Project would not generate a substantial new source of light and glare that adversely affects day or nighttime views in the area. Thus, the Proposed Project's impacts related to light and glare would be less than significant.

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3.2 AGRICULTURE AND FORESTRY RESOURCES

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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?	☒	☐	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒
c. 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))?	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒
e. 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?	☒	☐	☐

3.2.1 Environmental Setting

Important Farmland

Developed by the California Department of Conservation (CDOC), the Farmland Mapping and Monitoring Program (FMMP) provides consistent, timely, and accurate data for use in assessing agricultural land resource status in California. The program utilizes a combination of geographic information systems (GIS), aerial imagery, local agency comments, and other relevant information to combine soil quality data and current land use information to produce Important Farmland maps.

The FMMP maps out five different farmland categories as well as urban and other land (CDOC 2004):

> **Prime Farmland** – lands with the best combination of physical and chemical features able to sustain long-term production of crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the grow season. It must also have been used for production during the previous 4 years.
>
> **Farmland of Statewide Importance** – lands similar to Prime Farmland but with minor shortcomings such as greater slope or less ability to store moisture.
>
> **Unique Farmland** – soils of lower quality that are used for producing California's leading agricultural crops. These lands are usually irrigated but may include non-irrigated orchards or vineyards.
>
> **Farmland of Local Importance** – lands such as dryland grains and irrigated pastures that are not considered Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.
>
> **Grazing Land** – land on which the existing vegetation is suited to the grazing of livestock.

The Proposed Project site is located within the City of Turlock's (City's) planning boundaries in Stanislaus County, California. Important Farmland in Stanislaus County in 2018 totaled 428,450 acres and was composed of 250,420 acres of Prime Farmland, 33,042 acres of Farmland of Statewide Importance, 121,930 acres of Unique Farmland, and 23,058 acres of Farmland of Local Importance (CDOC 2019). Stanislaus County's combined Important Farmland areas increased by approximately 3,000 acres from 2016, with minimal changes (+/-500 acres or less) in the Prime Farmland and Farmland of Statewide Importance categories, losses in Locally Important Farmland (3,000 acres), and gains in Unique Farmland (5,700 acres) (CDOC 2019). Within the City of Turlock's general plan study area, approximately 7,000 acres of Important Farmland exists, with Prime Farmland comprising the majority (approximately 5,000 acres) (City of Turlock 2012). The entire approximately 27-acre Proposed Project site is designated Prime Farmland and was farmed for row crops until CDFA's acquisition of the property in March 2020 (CDOC 2014).

California Land Conservation Act (Williamson Act)

The California Land Conservation Act, more commonly referred to as the Williamson Act, was passed in 1965 as a means to preserve agricultural and open space lands by discouraging "premature and unnecessary conversion to urban uses" (Government Code Section 51220[c]). Through this act, local governments and landowners may choose to forgo the possibility of developing their lands or converting their property to nonagricultural or non–open space use for a set amount of time determined in the contract. In return, they receive lower property

taxes. Contracts have an initial term of 10 years with renewal occurring automatically each year after this term (CDOC 2020a, 2020b).

According to the *2015 Stanislaus County Agricultural Report,* 575,549 acres in the county are registered as being under Williamson Act contract. This accounts for approximately 60 percent of the total agricultural acreage in the county (Stanislaus County Agricultural Commissioner 2015). The Proposed Project is located on non-enrolled land and would therefore not violate any Williamson Act protection policies.

Timberland and Forestland

The following definitions of timberland, timber, and forestland are provided in the Public Resources Code and Government Code as provided in Appendix G of the State CEQA Guidelines:

> **Timberland** – defined as land, other than land owned by the federal government and land designated by the board as experimental forest land (privately owned land as well), which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees (Pub. Res. Code Section 4526).
>
> **Timber** – defined as trees of any species maintained for eventual harvest for forest products purposes, whether planted or of natural growth, standing or down, on privately or publicly owned land, including Christmas trees, but does not mean nursery stock (Government Code Section 51104[g]).
>
> **Forestland** – land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (Pub. Res. Code Section 12220[g]).

The Proposed Project is located on lands formerly used for agricultural purposes and does not contain timberland or forestlands.

3.2.2 Discussion

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance – *Potentially Significant*

The Proposed Project would be located on designated Prime Farmland. The Proposed Project would convert approximately 7 acres of the 27-acre Prime Farmland parcel to non-agricultural uses by constructing the proposed laboratory facilities. Future uses for the remainder of the 27-acre parcel are unknown. However, the City of Turlock has zoned the entire 27-acre parcel, including the Project site, for Office Commercial uses and considered conversion of this parcel to non-agricultural uses in the City's General

Plan (City of Turlock 2012). Following construction, the Proposed Project's laboratory operations would support agriculture but would not be considered an agricultural use. Therefore, the proposed Project would temporarily and permanently convert Prime Farmland, a **potentially significant** issue that will be evaluated further in the EIR discussion.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract – *No Impact*

The Proposed Project is located on non-enrolled land and is therefore not under Williamson Act contract. In addition, as stated above, the Project site is zoned for Office Commercial uses. The Proposed Project's construction and operation of the laboratory replacement facilities would not conflict with agricultural use zoning. Therefore, the Proposed Project would not conflict with Williamson Act contracts or agricultural zoning. Therefore, the Proposed Project would have **no impact** on agricultural zoning and Williamson Act contracts.

c. Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned for Timberland Production – *No Impact*

No timberland or timberland zoned Timberland Production areas are located within or adjacent to the Project site. According to Pub. Res. Code Section 4526, "timberland" is defined as non-federal land that is available for, and capable of, growing a commercial crop of trees of a species used to produce lumber and other forest products. No commercial tree crops are grown on the Proposed Project site, and none are grown in the project area. **No impact** would occur.

d. Result in the loss of forestland, or conversion of forest land to non-forest use -- *No Impact*

The Project site has no onsite trees or designated forest lands. The Proposed Project is not located on or near forestland or timberland, as defined in Pub. Res. Code Sections 12220(g) and 4526 or Government Code Section 51104(g). Therefore, the Proposed Project would not conflict with existing zoning for forestland or timberland or result in the loss of forest land or conversion of forest land to non-forest use. Similarly, the Proposed Project's laboratory operations would not directly or indirectly convert forest lands to non-forest uses. There would be **no impact**.

e. Involve other changes in the existing environment that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use – *Potentially Significant*

The Proposed Project would construct a new laboratory and office facilities along Dianne Drive, and, as described in the Criterion a discussion above, would directly convert approximately seven acres of Prime Farmland to non-agricultural uses, which

would be a potentially significant impact. Future uses of the remaining 20 acres within the parcel are unknown. However, by converting the seven acres of the parcel to non-agricultural uses, the Proposed Project would reduce the available acreage of Prime Farmland remaining within the approximately 27-acre land parcel and potentially make it less economically worthwhile to use the property for agricultural purposes. In addition, the Proposed Project's operations, including the transport of potentially sick or dead animals to the facility, may reduce the desirability to use the remaining parcel for adjacent agricultural uses if those uses would involve livestock. The Proposed Project would not include any other environmental changes that may indirectly convert agricultural uses to non-agricultural uses. The Proposed Project would not affect forestlands directly or indirectly convert forestlands to non-forestland uses. Thus, the Proposed Project's construction and operation would potentially convert agricultural lands to non-agricultural uses, which would be a **potentially significant** impact. This impact will be further evaluated in the EIR.

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3.3 AIR QUALITY

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:			
a. Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐

3.3.1 Environmental Setting

The Clean Air Act (CAA) is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, known as the National Ambient Air Quality Standards (NAAQS), for seven criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ground-level ozone (O_3), and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride.

The Proposed Project is located in Stanislaus County, which is within the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) manages air quality in the basin for attainment and permitting purposes. The SJVAB is currently in

nonattainment of state ambient air quality standards for ozone, PM2.5 and PM10. For federal ambient air quality standards, the SJVAB is in nonattainment for ozone and PM2.5. All other contaminants are in attainment or unclassified for state and federal ambient air quality standards. The CAA and the California Clean Air Act require areas that are designated nonattainment to reduce emissions until federal and state standards are met.

Toxic Air Polluants

The USEPA and CARB regulate various stationary, area, and mobile sources of toxic air pollutants. The USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles.

The USEPA and National Highway Traffic Safety Administration (NHTSA) set standards for passenger cars and light trucks for the Corporate Average Fuel Economy (CAFE) standards and greenhouse gas emissions standards. In March 2020, NHTSA and USEPA revised these standards under the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule which increases the stringency of fuel economy and carbon dioxide standards by 1.5% in stringency each year for model years 2021 through 2026. This is less than previous standards issued in 2012 which would have had increase of about 5% per year. The USEPA has granted CARB permission to establish emissions for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger-vehicle fuel specifications. Airborne Toxic Control Measures (ATCMs) are implemented to address sources of TACs.

Local Laws, Regulations, and Policies

The SJVAPCD's recommended CEQA thresholds are outlined in its *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015) and summarized in Table 3.3-1. SJVAPCD's thresholds for reactive organic gases (ROG) and oxides of nitrogen (NO_X), which are ozone precursors, are 10 tons/year for each pollutant. Ozone precursor emissions are generated from both heavy- and light-duty vehicle use. The SJVAPCD has determined that projects with emissions below the thresholds of significance for criteria pollutants would be determined to be in compliance with the applicable SJVAPCD air quality plans (SJVAPCD 2015).

Table 3.3-1. Applicable SJVAPCD Construction and Operational Significance Thresholds under CEQA

Pollutant	Threshold (tons/year)
Carbon monoxide (CO)	100
Oxides of nitrogen (NO_X; ozone precursor)	10
Reactive organic gases (ROG; ozone precursor)	10
Sulfur oxides (SO_X)	27
Particulate matter (PM10)	15
Fine particulate matter (PM2.5)	15

Source: SJVAPCD 2015

The SJVAPCD has adopted attainment plans to address ozone and particulate matter (PM). These air quality plans include the *2013 Plan for the Revoked 1-hour Ozone Standard*, a *2016 Ozone Plan to address USEPA's 2008 8-hour ozone standard*, and the *2020 RACT demonstration for the 2015 8-hour Ozone Standard*. For PM10 SJVAPCD has adopted the 2007 *PM10 Maintenance Plan and Request for Redesignation,* which demonstrates that the SJVAB complies with the PM10 standard. In addition, the SJVPACD has developed a single comprehensive attainment plan, the *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards*, to address the 1997, 2006, and 2012 PM2.5 standards under the federal CAA.

The Proposed Project is subject to several SJVAPCD Regulations including Regulation II – Permits and Regulation IV – Prohibitions and will require air permits. The Proposed Project would be subject to Regulation IX Rule 9510 Indirect Source Review. The Proposed Project is also subject to SJVAPCD Regulation VIII (Fugitive Dust Prohibitions). The purpose of Regulation VIII is to reduce the amount of PM10 entrained into the ambient air from anthropogenic sources. The Proposed Project will be required to implement the mandatory control measures listed in this rule to reduce fugitive dust emissions. These measures are not considered mitigation measures under CEQA because they are required by law.

The following portions of the Regulation VIII requirements are applicable to the Proposed Project:

- All disturbed areas, including storage piles, which are not being actively used for construction purposes, will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant, or covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities will be effectively controlled of fugitive dust emissions by utilizing an application of water or by presoaking.
- All materials transported off site will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.
- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, piles will be effectively stabilized to prevent fugitive dust emissions utilizing sufficient water or a chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.

3.3.2 Environmental Setting

San Joaquin Valley Air Basin

The SJVAB encompasses the southern half of California's Central Valley; the area is approximately 250 miles long and averages 35 miles wide. The SJVAB is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south. The SJVAB contains all of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties, as well as a portion of Kern County. The Proposed Project is located in the SJVAB within Stanislaus County.

Climate and Topography

The area has an inland Mediterranean climate that is characterized by warm, dry summers and cool, wet winters. Summer high temperatures often exceed 100 degrees Fahrenheit (°F), averaging in the low 90s in the northern valley and the high 90s in the southern portion.

Although marine air generally flows into the basin from the San Francisco Bay–Sacramento-San Joaquin River Delta region, the surrounding mountain ranges restrict air movement through and out of the valley. Wind speed and direction influence the dispersion and transportation of pollutants; the greater the wind flow, the lower the accumulation. The vertical dispersion of air pollutants in the SJVAB is limited by the presence of persistent temperature inversion, leading to higher concentrations of emitted pollutants (SJVAPCD 2015).

Precipitation and fog tend to reduce pollutant concentrations. Ozone is formed when chemical compounds such as ROG and NO_X (collectively known as ozone precursors) react with sunlight. Clouds and fog block the solar radiation, slowing or preventing the ozone-forming reaction. In the Turlock area of the SJVAB near the Proposed Project area, the average annual precipitation is approximately 12 inches (Western Regional Climate Center 2016).

The Proposed Project is located on the western side of the City of Turlock and Hwy 99. The parcel is adjacent to Hwy 99 and may experience significant air pollutants due to the high volume of traffic along this road. The Proposed Project is primarily surrounded by agriculture fields in active production which may result in sources of air pollution from agriculture machinery, pesticide use, animals, and fugitive dust. There are some farmhouses and farm buildings across Dianne Drive from the Proposed Project. There are dairies and agriculture processing facilities nearby which can contribute to air pollution and potentially odors. To the north of the Proposed Project site there is a brewery and taproom as well as a gas station.

3.3.3 Discussion

a. Conflict with or obstruct implementation of the applicable air quality plan – *Potentially Significant*

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in the applicable air quality plan, which, in turn, would generate emissions not accounted for in that air quality plan's emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the relevant air quality plans. The Proposed Project would involve the construction of laboratory facilities and offices that would potentially generate a minor increase in population and/or employment growth (see related discussion in Section 3.14 "Population and Housing"). This would involve up to 59 employees routinely commuting to the facility for work on a daily basis; although as detailed in Section 3.17 "Transportation," it is anticipated daily employee trips would likely be less. In addition, there would be additional vehicle trips associated with visitors and vendors to the facility.

The Proposed Project would involve the construction and long-term operation of several new stationary sources of emissions. This includes a cremator for cremation of animal remains, an emergency generator, and boilers. The use of construction equipment and

vehicles would result in a short-term generation of air pollutant emissions, including ozone precursors, PM10, and PM2.5, which could contribute to the region's existing nonattainment of these Ambient Air Quality Standards (AAQS). Operation-related vehicle use and stationary sources would similarly emit air pollutant emissions that could contribute to the region's existing nonattainment status of ozone, PM10, and PM2.5. At this time, detailed information is not readily available to prepare a quantitative emissions inventory to determine the extent of criteria pollutant emissions during the Proposed Project's construction and operations, and to determine if this would be above the SJVAPCD's thresholds of significance and thus result in a conflict with applicable air quality plans. The City of Turlock's General Plan (2012) contains several policies relating to air quality, including consideration of siting new receptors near Hwy 99, participation in employee-based trip reduction programs, and support of emission reduction measures for construction and indirect source review. These policies will need further examination to determine how the Proposed Project will meet applicable air quality plans and policies. Thus, this impact would be **potentially significant** and will be further analyzed in the EIR.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard – *Potentially Significant*

During construction of the Proposed Project, the combustion of fossil fuels for operation of fossil-fueled construction equipment, material hauling, and worker trips would result in construction-related criteria air pollutant emissions. Architectural coating would also contribute emissions during construction. Project operation would involve the combustion of fossil fuels from operation of vehicles traveling to the site, natural gas boilers, diesel emergency generators, and the cremator. The use of consumer products and solvents for laboratory activities would routinely occur and emit ozone precursors. Construction and operation-related emissions would primarily include fugitive dust emissions of PM10 and PM2.5 as well as ozone precursor emissions of NOx and ROG. The Project site is in a region that is designated in non-attainment for ozone, PM10, and PM2.5. It is assumed that projects that do not have mass emissions exceeding the screening level significance thresholds would not create a cumulatively considerable net increase in emissions. The Proposed Project would comply with the SJVAPCD's Regulation II, Regulation IV, and Regulation IX which would apply to project operations to minimize ozone precursor and particulate emissions. Regulation VIII, Fugitive Dust Prohibitions, would minimize particulate matter emissions during the project's construction. As discussed above, during construction and operation, PM10, PM2.5, NOx, and ROG emissions, which are ozone precursors, could exceed the applicable SJVAPCD significance thresholds. Depending on the Project's specific construction schedule and construction equipment, and the specific operation-related equipment, these emissions could be **potentially significant**. These emissions will be quantified and further analyzed in the EIR.

c. Expose sensitive receptors to substantial pollutant concentrations – *Potentially Significant*

During project construction, diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as TACs could be emitted from construction equipment. The active construction period for the proposed Project is short in duration (approximately 22 months). Due to the variable nature of construction activities, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that could result in the exposure of sensitive receptors to substantial concentrations. These emissions could expose sensitive receptors to substantial pollutant concentrations. Therefore, this impact would be **potentially significant** and will be investigated further in the EIR**.**

During the Proposed Project's operation, various TACs associated with fossil fuel combustion from the cremator, boilers, and generator could be emitted. Various TACs are associated with the laboratory operations that would be conducted at the facility, which can be emitted as fugitive emissions and through fume ventilation stacks. In addition, various gasoline-related TACs and DPM would be emitted by the vehicles traveling to the facility by workers and vendors. TACs could include such chemicals as benzene, toluene, ethylbenzene, 1,3-butadiene, acrolein, and xylenes.

Residential sensitive receptors are present near the Proposed Project site. The Proposed Project's emissions associated with routine operation of the cremator, boilers, laboratory use of chemicals, and testing of the diesel-powered emergency generator could emit TACs that could expose sensitive receptors to substantial air pollutant concentrations. This impact would be **potentially significant**. These emissions will be quantified and further evaluated in the EIR.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people – *Potentially Significant*

The Proposed Project's construction- and operation-related activities would emit the criteria pollutants discussed above as well as potentially odor-causing emissions. Diesel exhaust from construction activities may temporarily generate odors while construction of the Proposed Project is underway. Once construction activities have been completed, these odors would cease. Operational activities would also generate odors, mainly associated with use of the cremator and animals brought to the facility for testing. These odors would be short-lived and would occur intermittently. The land uses associated with this project are not ones that are typically odorous and are not routinely subject to SJVAPCD screening distances. Impacts related to potential other emissions adversely affecting a substantial number of people will be evaluated further in the EIR and thus this impact is **potentially significant**.

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3.4 BIOLOGICAL RESOURCES

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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?	☒	☐	☐
b. 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?	☐	☐	☒
c. 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?	☐	☐	☒
d. 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?	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP?	☐	☐	☒

3.4.1 Environmental Setting

The Project site is an approximate 7-acre parcel that is located within a portion of an approximately 27-acre parcel. The Project site is bordered by Hwy 99 to the east, West Canal Drive to the south, Dianne Drive to the west, and an almond orchard to the north. TID Lateral Canal is located directly south of the Project site. The concrete-lined canal is used to convey and distribute irrigation water to farms throughout TID's service area. Beyond the canal to the south is a detention basin that is used to capture and hold runoff during stormwater events and is also proposed for open/space recreational use (City of Turlock 2006).

The Project site consists of agricultural row crop land that had been routinely maintained for this purpose prior to CDFA's purchase of the land in March of 2020. At the time of the November 2020 biological reconnaissance field survey, the site had been recently disced. Ruderal vegetation consisting mostly of telegraph weed (*Heterotheca grandiflora*), Russian thistle (*Salsola tragus*), soft brome (*Bromus hordeaceus*), and mustard *(Brassica* sp.) were found within the Project site and along the Project site borders. No native vegetation communities or aquatic features occur within the site. The only existing structure on the site is an irrigation pumping/fertilizer facility, located in the southern section of the parcel. One almond tree is located along the northeast border of the site near Hwy 99. As such, suitable habitat for nesting birds could occur within the almond tree and within the more dense areas of ruderal vegetation within the site. Additionally, rodent burrows observed within the berms located in the northeastern portion of the site could provide suitable habitat for burrowing owls. Ruderal vegetation, rodent burrows, and adjacent trees outside of the site could also provide suitable roosting or nesting habitat. The topography is flat with an elevation of approximately 90 feet above mean sea level. Surrounding land uses include agricultural lands, rural residences, Hwy 99, commercial development (Volvo/Western Truck Center and Spectrum), the TID Lateral Canal, and a detention basin.

Potentially significant impacts to special-status species are briefly discussed below in Section 3.4.2 and will be fully presented in the EIR.

Special-Status Species

Special-status Plants. Fourteen sensitive plant species were identified in database searches associated with the Project (California Department of Fish and Wildlife [CDFW] 2020, U.S. Fish and Wildlife Service [USFWS] 2020a, California Native Plant Society [CNPS] 2020). **Appendix A**, Biological Resources Information, discusses these special-status plants and their potential to occur within the Project site. No special-status plants had potential to occur, or were observed, within the Project site. **Figure 3.4-1** shows special-status plants within 5 miles of the Project site. Special-status plants are protected by state and federal regulations, and/or are relevant under CEQA. The Project site is not within Critical Habitat for any plant species.

Special-status Wildlife (including fish). Twenty-seven special-status wildlife species (including four invertebrates, two amphibians, three reptiles, ten birds, four mammals, and four fish species) were identified in database and literature searches associated with the Project (CDFW 2020, USFWS 2020a, Western Bat Working Group [WBWG] 2020) as well as from biologists' personal observations of species in the project vicinity. *Appendix A: Special-Status Species Considered for Potential to Occur in or near the Project Site* discusses special-status wildlife and their potential to occur within the Project site. Of the 27 species identified, four wildlife species have a potential to occur within the Project site due to the presence of suitable and marginally suitable habitat and nearby occurrence records, or the species' widespread presence in the surrounding region. **Figure 3.4-2** shows special-status wildlife within 5 miles of the Project site. The Project site is not within Critical Habitat for any wildlife species. Special-status wildlife are protected by state and federal regulations, and/or are relevant under CEQA.

For the purposes of this assessment, special-status species are those that are listed as rare, species of concern, candidate, threatened, or endangered by USFWS or the CDFW. Special-status plant and wildlife species with the potential to occur in or near the Proposed Project site were identified through a review of the following resources:

- USFWS Information for Planning and Consultation Report (USWFS 2020a);
- California Natural Diversity Database (CNDDB) queries for the nine USGS 7.5-minute quadrangles containing and surrounding the Project site: Riverbank, Salida, Waterford, Brush Lake, Ceres, Denair, Crows Landing, Hatch and Turlock (CDFW 2020);
- CNPS's Inventory of Rare and Endangered Plants of California query for the nine U.S. Geological Survey (USGS) 7.5-minute quadrangles containing and surrounding the Project site (CNPS 2020);
- Western Bat Working Group (2020);
- USFWS Critical Habitat Mapper (USFWS 2020b); and
- eBird.org (eBird 2020a, 2020b).

Special-status species considered for their potential to occur in the Proposed Project site are provided in Appendix A.

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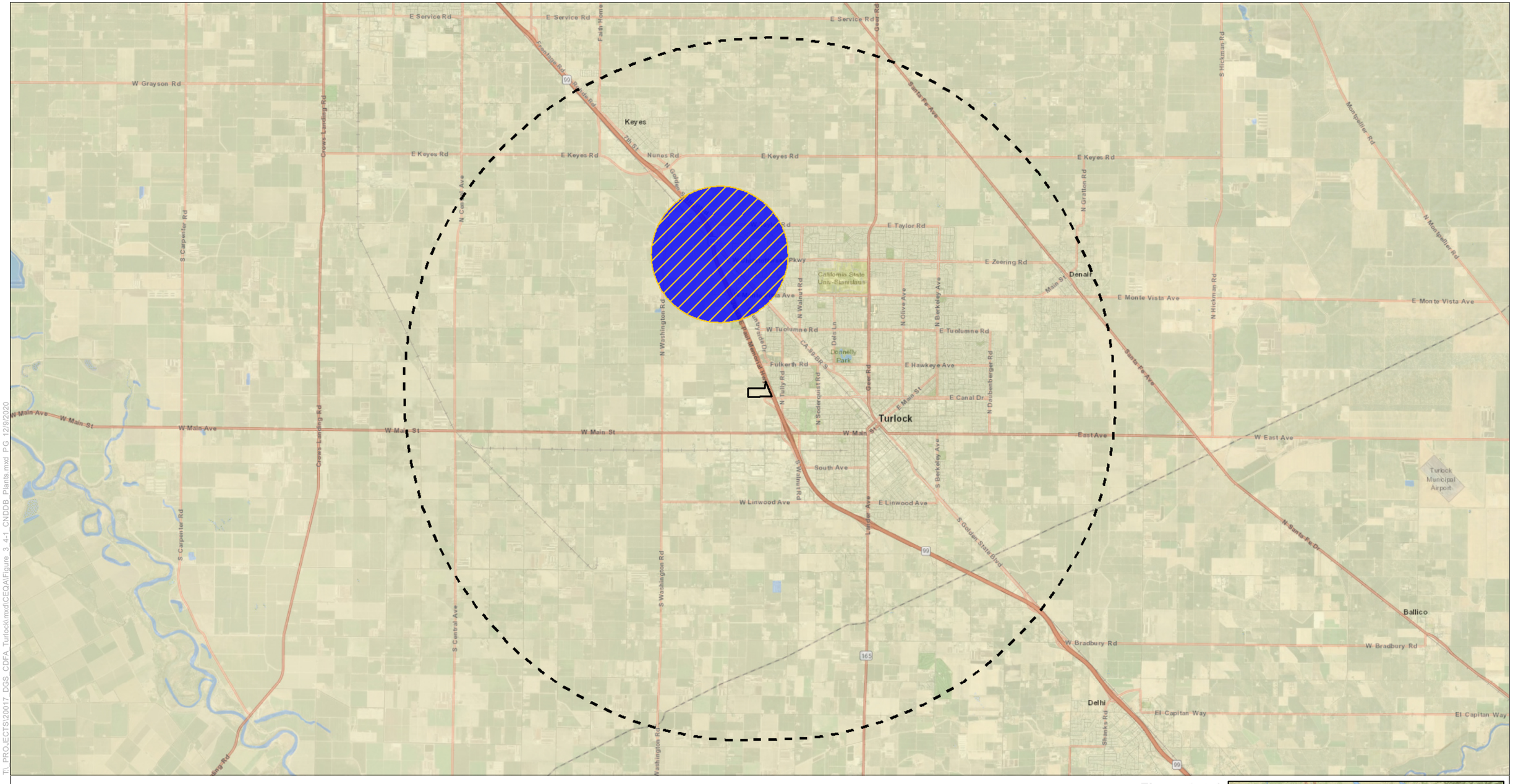

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N

0 1 2
Miles

Project Features

- Projct Site
- 5-mile Buffer

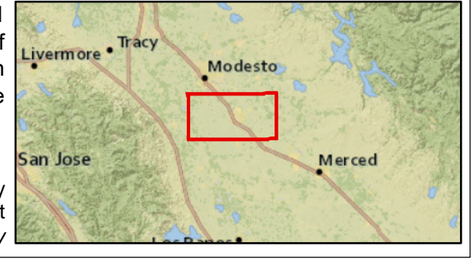
Special-status Plant Species

- heartscale
- subtle orache

Horizon WATER and ENVIRONMENT

Source: ESRI 2018, CDFW CNDDB 2020

Figure 3.4-1
CNDDB Occurrences of Special-status Plants within 5 miles of the Project Site



Tulock North Valley Laboratory Replacement Project
Initial Study

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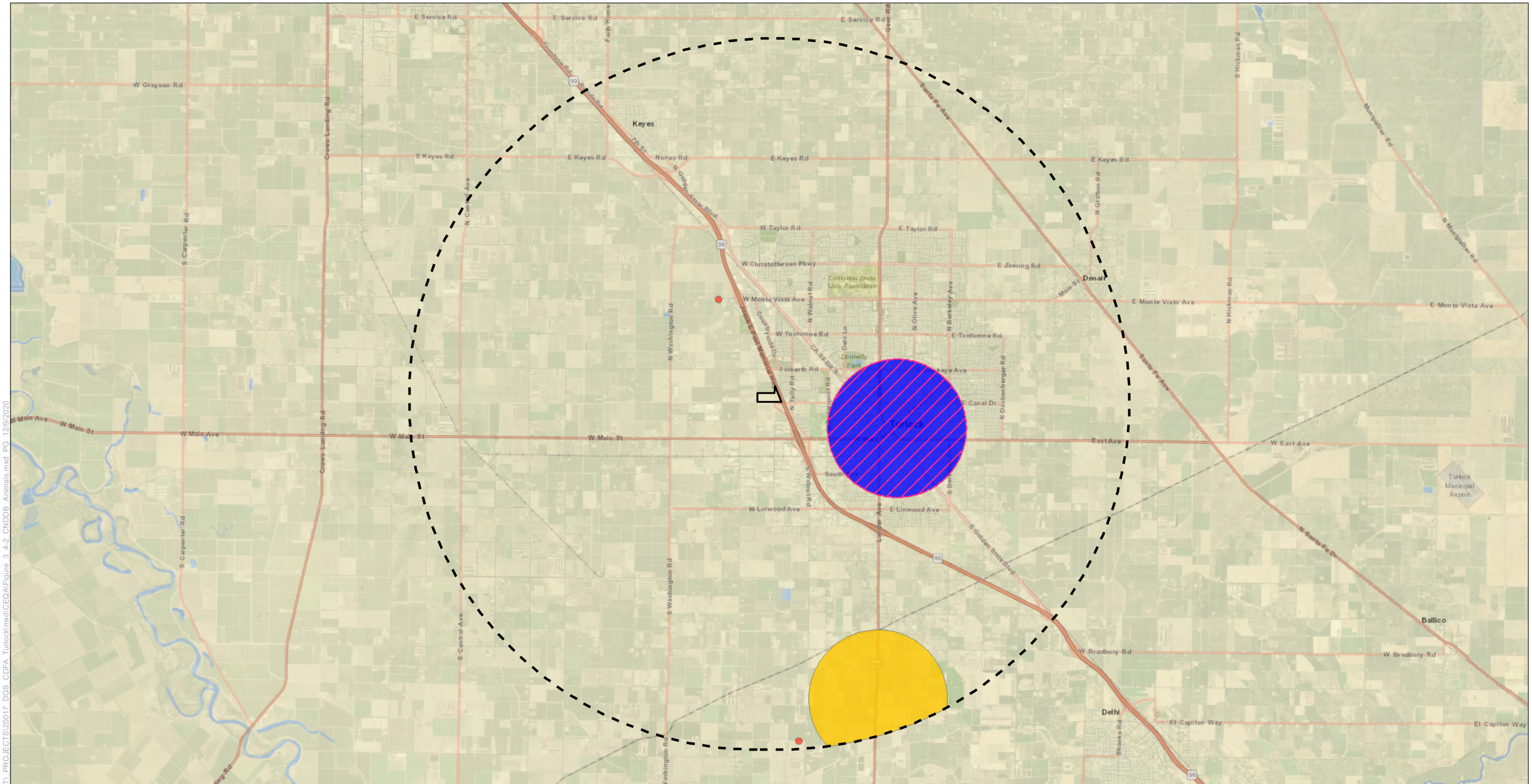

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N

0 1 2
Miles

Project Features

- Projct Site
- 5-mile Buffer

Special-status Animal Species

- Crotch bumble bee
- Northern California legless lizard
- Swainson's hawk
- tricolored blackbird

Horizon WATER and ENVIRONMENT

Source: ESRI 2018, CDFW CNDDB 2020

Figure 3.4-2
CNDDB Occurrences of Special-status Animals within 5 miles of the Project Site

Tulock North Valley Laboratory Replacement Project
Initial Study

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3.4.2 Discussion

a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species – *Potentially Significant*

The Project site and immediate vicinity support habitat for several special-status wildlife species. Construction activities that disturb burrows, generate noise, or create visual distractions during the breeding season could disturb nesting birds and raptors within the Project site and vicinity. Impacts to special-status wildlife (burrowing owl [*Athene cunicularia*], Swainson's hawk [*Buteo swainsoni*], northern harrier [*Circus hudsonius*], and white-tailed kite [*Elanus leucurus*]) would be considered a **potentially significant impact** and will be further evaluated in the future EIR.

b. Substantial adverse effect on any riparian habitat or other sensitive natural community – *No Impact*

The Project site occurs within an agricultural field. Ruderal vegetation occurs along the northern, eastern, and western borders of the site as well as within areas in the Project site. A detention basin is located to the south of the site, an orchard to the north, residences to the west, and Hwy 99 to the east. No riparian habitat or other sensitive natural communities are present at the site. Therefore, **no impact** to riparian habitat or other sensitive natural communities would occur.

c. Substantial adverse effects on federally protected wetlands – *No Impact*

Wetlands and other waters of the U.S. are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Waters of the state are protected by the Regional Water Quality Control Board (RWQCB) under the Porter-Cologne Water Quality Control Act, and impacts to the beds and banks of streams, lakes, and ponds are regulated by the CDFW under Section 1600 of the California Fish and Game Code.

A search of the USFWS National Wetland Inventory (USFWS 2020c) and the California EcoAtlas mapper (California Wetlands Monitoring Workgroup 2020) revealed no state or federally protected wetlands within the Project site or surrounding area. Additionally, no potential wetland features or waters of the U.S. were observed within the Project site during the November 2020 biological reconnaissance site visit.

TID Lateral Canal, located south of Proposed Project site, is a concrete-lined irrigation canal created and used for conveyance of irrigation water to surrounding agricultural operations. This canal is not expected to be a water of the U.S., but it may be considered a water of the State. The detention basin located south of the Project site has been designed for joint open space/recreation and stormwater management use (Wade Associates 2004) and would not be considered a water of the U.S. and State. Both TID's

Lateral Number 4 and the detention basin are not within the Project site and would not be affected by construction activities. The Proposed Project would not have an adverse effect on any federally or State protected wetlands, and therefore, **no impact** would occur**.**

d. Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites – *No Impact*

The Project site is located within an agricultural field and is bounded by an almond orchard to the north, Hwy 99 to the east, Dianne Drive and rural residences to the west, and West Canal Drive, a detention basin, and commercial businesses to the south.

No known wildlife movement corridors or nursery sites are known to occur within the Project site. Construction of the Proposed Project would not substantially interfere with wildlife movement or an established wildlife corridor, as the Project site is relatively isolated by roads, rural residential and agricultural development, and Hwy 99. Construction activities would generate noise and an increased level of human activity relative to the existing conditions. The location of dispersed nests can be random, with the exception of routinely used nests (e.g., raptors) and rookery sites, and are generally not considered wildlife nursery sites. As discussed above under Criterion a, project-related noise and human activity could disrupt nesting birds or raptors that could potentially utilize burrows and vegetation within or near the Project site. Such impacts to active bird and raptor nests are discussed under Criterion a. Since no routinely used wildlife nursery sites are known to occur in or near the Project site, **no impact** to wildlife migration corridors or nursery sites is expected to occur.

e. Conflict with local policies or ordinances protecting biological resources – *No Impact*

The Proposed Project would not conflict with the County of Stanislaus' Conservation/Open Space Element in the Stanislaus County General Plan (2015), the City of Turlock's Biological Resource section in the Westside Industrial Specific Plan (2006), or the City of Turlock's Conservation Element in the City of Turlock's General Plan (2012). Additionally, there are no local ordinances that are applicable to the Project. The future EIR will include and require the implementation of mitigation measures for protection of special-status species that are generally consistent with the intent of these plans and the City's Conservation Element, which would eliminate any potential for conflict with requirements of the County's Conservation/Open Space Element, the City's Westside Industrial Specific Plan Biological Resource section, or the City's Conservation Element. Therefore, implementation of the Project would result in **no impact** arising from conflicts with local ordinances and policies protecting biological resources.

f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP – *No Impact*

Pacific Gas and Electric's (PG&E) San Joaquin Valley Operation and Maintenance Habitat Conservation Plan (O&M HCP) covers portions of nine counties, including Stanislaus County, that contain PG&E's gas and electrical transmission and distribution facilities, private access routes to infrastructure associated with O&M activities, minor facility expansion areas, and mitigation areas for impacts resulting from covered activities (PG&E 2006). Activities that are covered under the O&M HCP are primarily small-scale temporary effects implemented by PG&E. Because this Habitat Conservation Plans (HCP) is specifically for PG&E's O&M activities, it is not applicable to the Proposed Project. Regardless, the future EIR will include and require the implementation of mitigation measures for the protection of special-status species that are generally consistent with the intent of the O&M HCP. Furthermore, the Project site and surrounding area is not covered by other HCPs or Natural Community Conservations Plans, and; therefore, would not conflict with such plans. As a result, the Proposed Project would have **no impact**.

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3.5 CULTURAL RESOURCES

Significance Criteria	*Potentially Significant Impact*	*Less Than Significant Impact*	*No Impact*
Would the project:			
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐

3.5.1 Environmental Setting

Information presented in this section is based on initial data generated by a record search at the Central California Information Center (CCIC) of the California Historical Resources Information System at California State University, Stanislaus, and a pedestrian archaeological survey of the project area. A more detailed study will be conducted for the EIR analysis.

The Project is located in the northern San Joaquin Valley. Archaeological evidence for the region documents occupation by prehistoric groups spanning 12,000 years. Ethnographically, the region was occupied by the Northern Valley Yokuts peoples prior to colonization by Europeans. The Northern Yokuts were organized as politically autonomous, hunter-gather tribelets that concentrated their villages along the San Joaquin River and its tributaries. While the surrounding valley plains contained an abundance of wildlife, the lack of surface water precluded establishment of large Yokuts settlements. The historic era began in Stanislaus County when the first Spanish expedition entered the San Joaquin Valley in 1806 under the leadership of Gabriel Moraga. Although the Spanish never established missions in the valley, the Yokuts were forcibly removed to missions in the San Francisco Bay area during the early decades of the 1800s, causing significant harm to the Northern Valley Yokuts people and culture.

After Mexico ceded from Spain, large grants of land were awarded to Mexican nationals. Three such land grants, or ranchos, were founded in Stanislaus County, though none were in the project vicinity. Settlement of the project area began following the early days of Gold Rush, when farmers-turned-miners returned to their agricultural roots and began growing grains and vegetables, and planting orchards. Turlock was part of a large wheat operation owned by John W. Mitchell, who owned 100,000 acres in the area from Turlock to Atwater. He began growing large acreages of wheat in 1867, hauling his abundance to Stockton. He soon began building houses on sections of land that he sold to other farmers. Non-farmers also moved to the area and began various businesses such as a blacksmith, grocery stores and hotels; a post office was established in 1870. During this time Mitchell had granted right of way to the railroad, which constructed a depot, called Turlock, in 1871.

A record search at the CCIC (Records Search File: 11419N) for the Proposed Project determined that no cultural resources had previously been recorded within the project parcel or within 0.5 mile of the project. Similarly, no archaeological studies had been conducted of the Proposed Project site, though five surveys had been conducted within the 0.5-mile record search buffer. A sacred lands search of files maintained by the Native American Heritage Commission also resulted in negative results. A pedestrian survey of the project area by a qualified archaeologist on November 10, 2020 failed to identify any cultural resources within the project study area.

3.5.2 Discussion

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 – *No Impact*

The record search did not identify any known built environment or archaeological resources within the project parcel that meet the criteria for a historical resource pursuant to Section 15064.5. Therefore, there will be **no impact** to known historical resources. Buried resources discovered during project construction are addressed under Criterion b) and c) below.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 – *Potentially Significant*

The CCIC record search and pedestrian survey of the project parcel did not identify any archaeological resources. However, archaeological resources do not always have a surface manifestation and may be buried, only to be discovered during project construction. If such resources are found during construction and cannot be avoided by the project, then they must be evaluated for listing on the California Register of Historical Resources. If an eligible property cannot be avoided, then impacts to the resource must be mitigated. Mitigation could consist of capping or data recovery excavations. Due to the possibility of the discovery of buried archaeological sites, the Proposed Project may result in **potentially significant** impacts. This impact will be evaluated further in the EIR.

c. Disturb any human remains, including those interred outside of dedicated cemeteries– *Potentially Significant*

The presence of human remains has not previously been recorded within the project parcel, according to the CCIC record search; nor were they discovered during the pedestrian survey. Similar to archaeological resources, however, they may be encountered during project construction. In the unlikely event that human remains are encountered during project construction activities, work shall halt in the immediate vicinity in accord with the State Health and Safety Code section 7050.5 and the county coroner shall be contacted to determine the origin and disposition of the remains. If the remains are determined to be of Native American origin, the coroner will notify the Native American Heritage Commission within 24 hours. Pursuant to Pub. Res. Code 5097.8, the commission will assign and contact the Most Likely Descendant who will be responsible for making recommendations concerning the disposition of the remains. Due to the possibility of the discovery of buried human remains, the Proposed Project may result in **potentially significant** impacts. This impact will be evaluated further in the EIR.

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3.6 ENERGY

Significance Criteria	*Potentially Significant Impact*	*Less Than Significant Impact*	*No Impact*
Would the project:			
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐

3.6.1 Environmental Setting

Energy resource-related regulations, policies, and plans at the state level, require the regular analysis of energy data and developing recommendations to reduce statewide energy use, and setting requirements on the use of renewable energy sources. Senate Bill (SB) 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2020). The *2018 Integrated Energy Policy Report Update* includes policy recommendations such as addressing the vulnerability of California's energy infrastructure to extreme events related to climate change, including sea-level rise and coastal flooding (CEC 2018).

In addition, since 2002, California has established a Renewables Portfolio Standard (RPS) program, through multiple senate bills (SB 1078, SB 107, SB X1-2, SB 350, SB 100) and executive orders (S-14-08, B-55-18), that requires increasingly higher targets of electricity retail sales be served by eligible renewable resources. The established eligible renewable source targets include 20 percent of electricity retail sales by 2010, 33 percent of electricity retail sales by 2020, 50 percent by 2030, and 100 percent zero-carbon electricity for the state and statewide carbon neutrality by 2045 (CEC 2019).

California has extensive energy resources, including an abundant supply of crude oil, high production of conventional hydroelectric power, and leads the nation in electricity generation from renewable resources (solar, geothermal, and biomass resources) (U.S. Energy Information Administration (EIA) 2020). California has the second highest total energy consumption in the United States but one of the lowest energy consumption rates per capita (48th in 2018) due to its mild climate and energy efficiency programs (EIA 2020). A comparison of California's energy consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, by approximately two times compared to the other end-use sectors (Industrial,

Commercial, and Residential, which are listed in order of greatest to least consumption) (EIA 2020). California is the largest consumer of motor gasoline and jet fuel in the United States (EIA 2020).

TID and PG&E provide natural gas and electricity, respectively, to the Proposed Project area. **Table 3.6-1** provides a more detailed breakdown of TID's energy resources. Approximately 29 percent of the power provided by TID comes from eligible renewable sources. Approximately 26 percent comes from large hydroelectric sources, while the remaining 46 percent comes from a mixture of nuclear, natural gas, and unspecified sources of power.

Table 3.6-1. Summary of Energy Sources for TID

Energy Resources	TID (2019) Utility Power Mix (%)	California (2019)** Utility Power Mix (%)
Eligible Renewable	28.8	31.7
Coal	0	3
Large Hydroelectric	25.7	14.6
Natural Gas	30.1	34.2
Nuclear	0.5	9
Unspecified Power*	0.2	7.3
Total	100	100

* "Unspecified sources of power" is defined as electricity from transactions that are not traceable to specific generation sources.

** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.

Sources: TID 2020.

3.6.2 Discussion

a. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation – *Potentially Significant*

The Proposed Project would use fossil fuels during project construction which is necessary for completion of the project. The construction equipment would be subject to state and federal regulations which require engines to meet certain performance standards. During operation, the Proposed Project would use fossil fuels to heat and operate the facility as well as dispose of animal carcasses. Employees, vendors, and visitors to the facility would use fossil fuels in vehicles used to transport them to and from the facility. The facility would consume electricity not only for lighting in the

building, but also for operation of laboratory equipment and refrigeration units. Depending on the Project's specific construction schedule and construction equipment as well as the specific operation-related equipment, refrigerants, and building direct and indirect energy use, this use could be **potentially significant**. The amount of energy use will be quantified and further analyzed in the EIR.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency – *Potentially Significant*

The Proposed Project would follow all federal, state, and local regulations related to energy efficiency and use. While local plans, policies and regulations do not apply to the state, assessments of the Proposed Project's impacts on Air Quality, Greenhouse Gas Emissions, and Transportation, which inform the impact analysis for Energy, will be further evaluated in the EIR. For these reasons, the Proposed Project's impact could be **potentially significant** and will be further evaluated in the EIR.

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3.7 GEOLOGY, SOILS, AND SEISMICITY

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒
iii Seismic-related ground failure, including liquefaction?	☐	☒	☐
iv. Landslides?	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐
c. 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?	☐	☒	☐
d. 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?	☐	☐	☒
e. 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?	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐

3.7.1 Environmental Setting

Geology and Soils

The project area is located in the Great Valley geomorphic province of central California, often referred to as the California Central Valley. This geomorphic province is characterized as an alluvial plain approximately 50 miles wide and 400 miles long (California Geologic Survey [CGS] 2002). The Program area is within the central portion of the province at the northern end of the San Joaquin Valley. The San Joaquin Valley is bounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Range (Diablo Range) to the west.

The valley has been filled with a thick sequence of sediments derived from weathering of the adjacent mountain ranges resulting in a stratigraphic section of Cretaceous, Tertiary, and Quaternary deposits. Published geologic mapping depicts the site vicinity underlain by Quaternary age alluvial fan deposits (map symbol Qf), generally consisting of sand and silt over an even westward sloping surface (California Division of Mines and Geology [CDMG], 1966).

The eastern portion of the San Joaquin Valley and Program area lies in a region with limited faulting and relatively low seismic activity. Although ground shaking events periodically affect the region, ground shaking has historically been very minimal. Fault areas considered to be of greatest risk are identified as Alquist-Priolo fault zones. No Alquist-Priolo designated fault zones or potentially active faults exist within or near the project area. Most seismic activity in this region stems from the San Andreas Fault Zone and associated fault systems west of the project area.

Turlock and the surrounding area, including the project area, is relatively flat with little variation in topography. The Natural Resources Conservation Service (NRCS), Web Soil Survey indicates that soils in the project area consist of Delhi Loamy Sand, Dinuba and Greenfield Sandy Loam on 0 to 3% slopes (NRCS 2020). These soil units are comprised of well drained sandy alluvium derived from granite with a very low to medium runoff class. These soils have a low potential from erosion by water and are moderately susceptible to erosion by wind (NRCS 2020).

Paleontological Resources

Information presented in this section is based on a review of geologic maps and initial data generated by a record search at the University of California, Berkeley Museum of Paleontology (UCMP). Based on a review of geologic mapping prepared by Wagner, et al. (1991), the Proposed Project site is located within the Modesto Formation. This formation is of Late Pleistocene age (i.e., 12,000–42,000 years before present [B.P.]). The Modesto Formation is composed of tan and light-gray gravely sand, silt, and clay, and is found as alluvial terraces, alluvial fans, and abandoned channel ridges of major streams and rivers such as the San Joaquin, Tuolumne, and Merced.

A records search was performed through the UCMP on December 2, 2020. No fossil localities have been recorded within the Proposed Project site. However, fossil specimens from sediments referable to the Modesto Formation have been reported at a variety of locations throughout the San Joaquin Valley, including Stockton, Tracy, Manteca, Modesto, and Merced (UCMP 2020). The Tranquility site in Fresno County (UCMP V-4401) has yielded more than 130 Rancholabrean-age fossils from sediments referable to the Modesto Formation. Additional vertebrate fossil specimens from sediments referable to the Modesto Formation have also been recovered from the Sacramento Valley. Furthermore, Jefferson (1991a and 1991b), reported a variety of localities throughout the Sacramento and San Joaquin Valleys that yielded vertebrate fossils from sediments attributable to the Modesto Formation. Therefore, this formation is considered to be of high paleontological sensitivity.

3.7.2 Discussion

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death including:

i. Rupture of a known earthquake fault; ii. Strong seismic ground shaking; and iv. Landslides – *No Impact*

The Project site is in the Central Valley with no known active faults near the project area or in the valley portion of Stanislaus County. The Proposed Project would not rupture, nor exacerbate the likelihood of rupture, of a known earthquake fault. No impact would occur.

Ground movement during an earthquake can vary depending on the overall event magnitude, distance to the fault, and underlying geological units. The greatest seismic hazard in Turlock would likely be ground shaking from earthquakes originating from historically active faults over 45 miles away in the San Francisco Bay region (San Andreas Fault Zone) and the Mammoth Lakes and Owens Valley regions (Hilton Creek Fault Zone and Owens Valley Fault Zone) (CGS 2010). Severe ground shaking has a low potential to occur at the Proposed Project site and the project would not substantially increase the likelihood of strong seismic ground shaking.

Landslides or slope failure may occur in steeply sloped areas (15 percent slope or greater) following heavy rains, seismic events, or human activities (e.g., grading or excavation activities). The Proposed Project site is flat; therefore, the risk of seismic induced landslides is negligible.

The Proposed Project would have **no impact** on, nor exacerbate the likelihood of, rupture of a known earthquake fault, strong seismic ground shaking, or landslides.

iii. Seismic-related ground failure, including liquefaction – *Less than Significant*

Liquefaction is the temporary transformation of saturated and very low cohesion or cohesionless soils into a viscous liquid as a result of ground shaking. Liquefaction may occur in water-saturated sediment during moderate to large earthquakes. No specific liquefaction hazards have been identified in Stanislaus County (Bryant and Hart 2007). However, areas with higher water tables and unconsolidated, granular sandy soils may be at increased risk for liquefaction. Within the project area, the potential for damage to structures as a result of liquefied sediment can be addressed through compliance with State regulations (including the California Building Code [CBC]) and implementation of standard construction practices. The CBC is intended to ensure that buildings resist major earthquakes of the intensity or severity of the strongest experienced in California, without collapse, but with some structural as well as nonstructural damage. With adherence to construction specifications as defined in the CBC, potential impacts from liquefication would be **less than significant**.

b. Result in substantial soil erosion or the loss of topsoil – *Less than Significant*

Construction activities would have the potential to contribute to accelerated erosion. During construction, clearing, grubbing, and grading activities would remove ground cover and expose and disturb soils. Exposed and disturbed soil would be vulnerable to erosion from wind and precipitation events, with soil particles becoming entrained in the runoff. Altered drainage patterns on site as a result of construction could also cause redirection and concentration of runoff, potentially further exacerbating the erosion problem.

A stormwater pollution prevention plan (SWPPP) would be required for construction permitting and would include erosion and sediment control best management practices (BMPs), such as silt fences, straw hay bales, gravel or rock-lined ditches, water check bars, broadcasted straw, hydroseeding, or other suitable measures. These BMPs would be implemented to ensure effective erosion control during construction. Exposed soils within the work area would be stabilized or landscaped following completion of construction activities. With erosion control BMPs and SWPPP compliance, impacts related to accelerated erosion during construction are expected to be **less than significant**.

c. 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 – *Less than Significant*

The project area topography is flat with slopes ranging from zero to less than 3% grade. Alterations to the topography and subsurface conditions would be limited to the temporary construction and shallow excavation for building foundations. During this period, open trenches are at risk of potential failure. However, these risks are minimized through compliance with State regulations and the CBC and implementation and standard construction practices. In addition, as described above, the Proposed Project's design and operations would adhere to construction specifications as defined in the CBC and would not result in landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, potential impacts from the Proposed Project to result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be considered **less than significant**.

d. 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 – *No Impact*

Soils that contain a relatively high percentage of clay minerals have the potential to shrink and swell with changing moisture conditions. The main soil types found in the vicinity of the Proposed Project site include Delhi Loamy Sand, Dinuba and Greenfield Sandy Loam (NRCS 2020). These soils are characterized as loamy sand and sandy loams with low clay composition and low degree of plasticity (<10% on the plasticity index). As such, these soils are not expansive. **No impact** would occur.

e. 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 – *No Impact*

No septic tanks or alternative wastewater disposal systems would be installed as part of the Proposed Project. Used water from the truck rinse would be captured in pit drains to the sanitary sewer system with oil and soil separators. Other wastewater from the Proposed Project would be transported to the City of Turlock's wastewater collection and treatment system. **No impacts** would occur.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature – *Potentially Significant*

Published geologic mapping depicts the site vicinity underlain by relatively young alluvial fan deposits (map symbol Qf) (CDMG 1966), as well as the Modesto Formation. The younger alluvial fan deposits in the Turlock region have a low paleontological sensitivity as they consist of young sediments not known to have produced fossils. In addition, local subsurface data drill logs from wells approximately 800 feet southeast, 4,000 feet southwest, and 7,000 feet northwest from the Proposed Project site, found deep soils (5-10 feet below ground surface [bgs]) overlaying unconsolidated, alluvial units in this part of the valley (State Water Resources Control Board [SWRCB] 2020). However, the Modesto Formation, which is present for hundreds of feet underneath the surface, and at some locations in the region outcrops at the surface. Because this formation is of high paleontological sensitivity, the Proposed Project's construction-related earthmoving activities at depths greater than 10 feet could potentially encounter and subsequently damage and/or destroy unique paleontological resources. This would be a **potentially significant** impact. This impact will be further evaluated in the EIR.

3.8 GREENHOUSE GAS EMISSIONS

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐

3.8.1 Environmental Setting

Climate change is caused, in part, from accumulation in the atmosphere of Greenhouse Gases (GHGs), which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [CO_2], methane [CH_4], NO_2, and chlorofluorocarbons [CFCs]) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. Consequently, the cumulative analysis is the same as the discussion concerning Proposed Project impacts. GHG emissions are typically reported in terms of carbon dioxide equivalents (CO_2e) which converts all GHGs to an equivalent basis taking into account their global warming potential compared to CO_2.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

In 2018, total California GHG emissions were 425 million metric tons of carbon dioxide equivalents (MMT) CO_2e (CARB 2020). This is 6 MMT CO_2e below the 2020 GHG Limit set by Assembly Bill (AB) 32. This represents a per capita GHG emission rate of 10.7 metric tons (MT) per person. In 2018, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 40 percent of the total emissions and represented a decrease in emission for this sector for the first time since 2013. Emissions from the electricity sector account for 15 percent of the inventory and showed a slight increase in 2018 due to less hydropower. Emissions from high-global warming potential (GWP) gases have continued to increase as they replace ozone-depleting substances that are being phased out.

A baseline inventory was conducted of GHG emissions in Stanislaus County, including the nine cities within the county, during 2005 (ICF International 2013). Total 2005 GHG emissions from the Stanislaus County region were approximately 6.042 MMT CO_2e (specifically, 6,042,232 MT CO_2e), which does not include stationary-source emissions (658,692 MT CO_2e). Stationary sources, including landfills, were not included because they are regulated by separate federal and state regulations. The greatest regional GHG emission sources were building energy (a combined electricity and natural gas contribution of 40 percent), on-road transportation (27 percent), and agriculture (24 percent). Water-related emissions were approximately 0.5 percent. Per capita GHG emissions for Stanislaus County were 10.2 MT CO_2e, which was less than the 2005 statewide per capita GHG emission rate (12.5 MT CO_2e) but similar to the per capita emission rate of other counties (e.g., Sacramento County, 11.0 MT CO_2e; San Diego County, 10.0 MT CO_2e) (ICF International 2013).

Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. The USEPA and NHTSA set standards for on-road vehicles.

In recent years, California has enacted numerous policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. SB 32, a follow-up to the California Global Warming Solutions Act of 2006 (AB 32), similarly calls for a statewide GHG emissions reduction to 40 percent below 1990 levels by December 31, 2030. Executive Orders (EOs) S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard, which requires electricity suppliers to increase the amount of electricity generated from renewable sources. CARB has implemented a mandatory reporting regulation and a cap-and-trade program for large emitters of GHGs.

California's 2017 Climate Change Scoping Plan outlines the strategies that will be implemented to reach the 2030 goal (CARB 2017). This includes focusing on increasing building efficiency, increasing renewable power, using clean and renewable fuels, using cleaner aero or near zero vehicles, enhancing walkable and bikeable communities with transit, cleaner freight and goods movement, reduce high GWP pollutants, cap emissions from key sectors, and invest in communities to reduce emissions.

The SJVAPCD recommends evaluating the significance of operational project-specific GHG emission impacts on global climate change, based on the use of Best Performance Standards (BPS). The SJVAPCD defines BPS as "the most effective achieved-in-practice means of reducing or limiting GHG emissions from a GHG emissions source." Types of BPS include equipment type,

equipment design, operational and maintenance practices, measures that improve energy efficiency, and measures that reduce vehicle miles traveled (VMT). There are not clear BPS or thresholds for the evaluation of construction-related or short-term, one-time effects under CEQA. In addition, lead agencies are not restricted by the SJVAPCD guidance from establishing their own processes and guidance for determining significance of project-related impacts on global climate change.

Stanislaus County and the City of Turlock have outlined several policies in their General Plans aimed at reducing GHG emissions and the impacts of climate change (Stanislaus County 2015 and City of Turlock 2012).

3.8.2 Discussion

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment – *Potentially Significant*

Construction of the Proposed Project would result in one-time emissions of GHGs during construction and a change in land use. These one-time emissions would not continue to occur once construction activities are complete. These emissions are from the combustion of fossil fuels used in the construction equipment, material hauling trips, and worker vehicle trips. The permanent change in land use from agriculture practice to an urban environment would also result in a one-time release of GHG emissions. Operation of the Proposed Project would result in annual GHG emissions from direct combustion of fossil fuels, solid waste, refrigeration systems, and indirect use of electricity and water use. The fossil fuels combusted during operation are from operation of the boilers, cremator, emergency generator, and vehicle trips. Permitted sources including the boilers, generators and cremators would be subject to SJVAPCD's BPS for these sources. The building envelope which impacts some of the direct and indirect energy use would be required to follow the latest Title 24 building codes. Depending on the Project's specific construction schedule and construction equipment as well as the specific operation-related equipment, refrigerants, and building direct and indirect energy use, these emissions could be **potentially significant**. These emissions will be quantified and further analyzed in the EIR.

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases – *Potentially Significant*

The Proposed Project would generate temporary emissions of GHGs and would include the implementation of measures to minimize the project's construction related emissions. Operational emissions will implement applicable BPS for stationary sources and the building will be built implementing Title 24 building standards. GHG emission reduction strategies that are in place to improve fuel efficiency of vehicles and decrease the life cycle emissions with the low carbon fuel standard would reduce GHG emissions associated with this project. Strategies outlined in the Scoping Plan that are applicable

to this project include increasing building efficiency, use of cleaner vehicles, walkable and bikeable communities, and reducing refrigerants. The City of Turlock's General Plan also has several relevant policies. The consistency of the Proposed Project with these policies will depend on the Project's specific design features and could be **potentially significant.** The consistency with these policies will be quantified and further analyzed in the EIR.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐
b. 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?	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒
d. 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, it creates a significant hazard to the public or the environment?	☐	☐	☒
e. Be 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 and result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐

3.9.1 Environmental Setting

Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released. Hazardous materials occur in various forms and can cause death, serious injury, and long-lasting health effects, as well as damage to buildings, homes, and other property. Hazardous materials can include explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, petroleum products, and other materials defined as hazardous under the Resource Conservation and Recovery Act of 1976 (RCRA) (40 CFR 261) and other hazardous materials/waste laws.

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); DTSC; California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); SWRCB; Central Valley RWQCB; and SJVAPCD.

In February 2019, GEOCON Consultants (GEOCON) prepared a Phase I and Limited Phase II Environmental Site Assessment evaluating the history and current conditions of the Proposed Project site and surrounding properties for the potential for hazardous chemicals or wastes to have adversely impacted the underlying soil and groundwater (GEOCON 2019). The Proposed Project site consists of relatively flat-lying agricultural row crop land with access from Dianne Drive. The TID Lateral Canal is adjacent to the property. The surrounding vicinity generally consists of agricultural land and rural residences west of Hwy 99 and residential and commercial development east of Hwy 99. Prior to CDFA's acquisition of the Proposed Project site in March 2020, the site included a diesel-powered generator and fertilizer pump. These facilities are no longer on site. There are several facilities near the Proposed Project site that are listed as small quantity waste generation/disposal, chemical storage, permitted underground storage tanks (USTs), and above ground storage tanks (ASTs) (GEOCON 2019):

- N. Daniel Farm, 1130 Dianne Drive, adjacent property to the north of the Proposed Project site;
- Western Truck Parts and Equipment, 730 N. Walnut Road, 250 feet south-southeast of the Proposed Project site;
- Holt of California, 700 N. Walnut Road, 500 feet south-southeast of the Proposed Project site;
- Shore Chemical Co., 743 N. Tully Road, 500 feet southeast of the Proposed Project site;

- Charter Communications, 731 N. Walnut Road, 700 feet south-southeast of the Proposed Project site; and
- Joe Gomes & Sons Inc., 725 N. Tully Road, 800 feet southeast of the Proposed Project site.

A facility located at 725 North Tully Road, which is approximately 800 feet southeast of the Proposed Project site, is on the Leaking Underground Storage Tanks (LUST) database for a release of gasoline to soil and groundwater. However, the Stanislaus County Department of Environmental Services closed its regulatory case regarding this release in 2012 (GEOCON 2019).

The limited Phase II Environmental Site Assessment (ESA) sampled the Proposed Project site for arsenic and organochlorine pesticides following USEPA Test Methods. Arsenic was detected in the samples, but at concentrations that likely represent naturally occurring background levels (GEOCON 2019). Organochlorine pesticides were not detected above the laboratory reporting limits except for one sample of dichlorodiphenyltrichloroethane (DDT) which was still several orders of magnitude below environmental screening levels.

3.9.2 Discussion

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials – *Potentially Significant*

Construction activities for the Proposed Project would require handling of hazardous materials, such as fuels, lubricating fluids, and solvents for use with construction equipment on-site. Accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storm events) to the underlying soils and groundwater.

The Proposed Project's operations would include the use of flammable and combustible material, poisons, petroleum products, and various chemicals used in the laboratory that would be considered hazardous material. The facility may also use radioactive material in small quantities for laboratory activities and laboratory equipment may emit non-ionizing radiation. The facility may work with transgenic materials including microorganisms, plants, and animals that have been genetically modified to assist in laboratory and research activities. The facility would work with live animals as well as animal tissue and other biohazardous materials and plans to dispose of animal carcasses by cremation onsite or at a rendering facility. Other biohazardous material would be transported offsite by a third party for proper disposal.

Operation of the Proposed Project would necessitate the use and storage of several hazardous items and materials. Items and materials that would be on-site and could

pose a risk to human health and safety and the environment. Hazardous materials would be stored on-site and used or disposed of at regular intervals. Accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials to the underlying soils and groundwater. This includes the use of hazardous material, operation of boilers and cremators, handling of biohazardous material, transgenic animals, and the potential use of radioactive material. These impacts may be considered **potentially significant** and this will be further evaluated in the EIR.

b. 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 – *Potentially Significant*

As described in a) above, the construction activities for the Proposed Project would require handling of hazardous materials and accidental spills or improper use, storage, or transport could result in a significant hazard to the public or environment. Operation of the Proposed Project would also use and store hazardous materials that could result in accidents or upsets that could involve a significant hazard to the public or environment. This includes the use of hazardous materials in the laboratory, operation of boilers and cremators, handling of biohazardous material, transgenic animals, and the potential use of radioactive material. These impacts may be considered **potentially significant** and this will be further evaluated in the EIR.

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school – *No Impact*

No existing or proposed schools are located within 1/4 mile of the Proposed Project site. Therefore, there would be **no impact**.

d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment – *No Impact*

A search of state records conducted for the proposed project indicates that no listed hazardous materials or waste sites are located on the project site (GEOCON 2019). Therefore, the Proposed Project would not be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and would not create a significant hazard to the public or environment associated with any such sites. Therefore, there would be **no impact**.

e. 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 or excessive noise for people residing or working in the project area – *No Impact*

No airports or airstrips are located within 2 miles of the Proposed Project site. The nearest airports are the Turlock Municipal Airport and the Modesto City-County Airport, which are both over 9 miles away from the Project site. Therefore, there would be **no impact.**

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan – *Potentially Significant*

Construction-related employee vehicle trips and truck trips for the Proposed Project would potentially increase traffic on Dianne Drive and cause slowdowns as construction vehicles enter and exit the Proposed Project site over the duration of the construction period. An increase in construction traffic could potentially impair emergency responders. In addition, Proposed Project operations would result in an increase in trips to the Proposed Project site. These impacts may be considered **potentially significant** and this will be further evaluated in the EIR.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires – *Potentially Significant*

The project site is located on the outskirts of the City of Turlock and in areas dominated by agriculture and rural residential, and it is not located within a wildland fire hazard area (California Department of Forestry and Fire Protection [CAL FIRE] 2007). During project-related construction activities, the use of mechanized equipment and motorized hand tools could spark and pose a fire risk. However, the project area is relatively flat with limited vegetative cover and is readily accessible by emergency vehicles on public roads and private agricultural roads. The facilities being proposed could be a source of a fire given the use of boilers and a cremator. Therefore, the Proposed Project's potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires could be **potentially significant** and this will be further evaluated in the EIR.

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3.10 HYDROLOGY AND WATER QUALITY

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Proposed Project:			
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☒	☐	☐
c. Substantially alter the existing drainage pattern of the site or area, including through 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?	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐

3.10.1 Environmental Setting

Regional Watershed Setting

The City of Turlock, and the Project site, are situated within the San Joaquin River Hydrologic Region, Tuolumne River Sub-basin. The San Joaquin Hydrologic Region covers an area of approximately 15,200 square miles and includes counties of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus (Department of Water Resources [DWR} 2003). The Turlock Subbasin lies between the Tuolumne and Merced Rivers and is bounded on the west by the San Joaquin River and on the east by crystalline basement rock of the Sierra Nevada foothills (DWR 2006). The Project site is located at an elevation of approximately 90 feet above mean sea level.

The climate of the San Joaquin Valley region is semi-arid to arid and characterized by mild, wet winters and warm, dry summers (DWR 2015). Most of the region's precipitation falls between October and April (DWR 2015). In the Turlock area, the lowest average monthly temperature is approximately 38 °F in the winter (Western Regional Climate Center (WRCC) 2017). The highest average monthly temperature reaches approximately 95 °F in the summer (WRCC 2017). This area receives an average of 11.9 inches of precipitation annually (WRCC 2017).

Surface Water

No surface water bodies are located on the Project site. The nearest man-made surface waters to the Project site include TID Lateral Canal located directly south of the Project site (Figure 2-2). The concrete-lined canal is used to convey and distribute irrigation water to farms throughout TID's service area. Beyond the canal to the south is a detention basin that is used to capture and hold runoff during stormwater events and is also proposed for open/space recreational use (City of Turlock 2006).

The nearest major rivers to the City are the San Joaquin River and the Tuolumne River, located approximately ten miles west and six miles north, respectively. The Tuolumne River is the nearest natural surface water body to the Project site, which is 8 miles south of the river. The Tuolumne River ultimately is a tributary to the San Joaquin River. The segment of the Tuolumne River from New Don Pedro Dam downstream to its confluence with the San Joaquin River, including the proposed project area, is designated for the following existing beneficial uses: irrigation, stock watering, contact recreation, canoeing and rafting, other non-contact recreation, warm- and cold-water freshwater habitat, cold-water migration, warm- and cold-water spawning, and wildlife habitat (Central Valley RWQCB 2018). Municipal and domestic supply is listed as a potential beneficial use (Central Valley RWQCB 2018).

Under Section 303(d) of the Federal Clean Water Act, states are required to identify "impaired water bodies" (i.e., those water bodies not meeting established water quality standards); identify the pollutants causing the impairment; establish priority rankings for waters on the list; and develop a schedule for adoption of control plans to improve water quality. The Lower

Tuolumne River reach from Don Pedro Reservoir to the San Joaquin River (approximately 60 miles) is listed on the 2014-2016 303(d) list for the following impairments: Group A pesticides, mercury, toxicity, and water temperature (SWRCB 2018).

Stormwater

Stormwater infrastructure and maintenance in the Project vicinity is provided by the City of Turlock. The City utilizes detention/retention basins to capture runoff throughout the City, and, for areas without these basins, pumps runoff to TID's local drainage channels for disposal after a storm event. The City maintains a discharge permit with the TID that limits the amount of stormwater that can be discharged into the canals (City of Turlock 2013). The City of Turlock's stormwater discharges are covered under the SWRCB's General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s). The City's stormwater system planning and infrastructure improvements are based on the City's Storm Water Master Plan (2013).

At the Project site, the parcel is relatively flat and comprised of pervious surfaces (i.e., former agricultural lands). Stormwater generated on the Project site either infiltrates into the soil or sheet-flows toward the south. A stormwater retention system will be located on the Project site and will retain water for an 85th percentile storm. A 60-inch storm drain located adjacent to the Proposed Project site flows south on Dianne Drive and discharges to the detention basin located south of TID Lateral Canal. The Proposed Project will either connect into this existing storm drain or stormwater runoff would be conveyed into a landscape strip within the right-of-way on Dianne Drive.

Groundwater Basin and Sustainability Planning

The Proposed Project is located within the San Joaquin Valley Groundwater Basin, Turlock Subbasin (subbasin 5-22.03). This subbasin lies between the Tuolumne and Merced Rivers and is bounded on the west by the San Joaquin River and on the east by crystalline basement rock of the Sierra Nevada foothills. The primary hydrogeologic units in the Turlock Subbasin are consolidated and unconsolidated sedimentary deposits of varying ages/composition, making up three groundwater bodies: the unconfined water body; the semi-confined and confined water body in the consolidated rocks; and the confined water body beneath the E-clay[2] in the western portion of the subbasin (DWR 2006). The Turlock Subbasin has an area of approximately 544

[2] "E-clay" is a term used to describe a clay layer, also known as the Corcoran clay, underlying the western half of the Turlock Subbasin. This clay layer is present at depths ranging between 50 and 200 feet below ground surface and establishes an effective barrier to water movement between the confined and unconfined water bodies (DWR 2006).

square miles. The Turlock Subbasin has been identified as a "high priority" basin under DWR's California Statewide Groundwater Elevation Monitoring (CASGEM) Program (DWR 2020a).

The Sustainable Groundwater Management Act (SGMA) became law in 2015 and created a legal and policy framework to manage groundwater sustainably. The Proposed Project site is within the groundwater sustainability agency (GSA) jurisdiction of the West Turlock Subbasin Groundwater Sustainability Agency, which is composed of twelve public agencies. Together with the East Turlock Subbasin GSA, the West Turlock Subbasin GSA is planning to adopt a single groundwater sustainability plan covering the entire Turlock Subbasin (Turlock Groundwater 2020). The Turlock Subbasin must be covered by a DWR-approved Groundwater Sustainability Plan by January 31, 2022 (Turlock Groundwater 2020).

The primary source of groundwater recharge in the Turlock subbasin is agricultural and urban irrigation (TID 2008). Additional groundwater recharge sources include precipitation, percolation from the Tuolumne and Merced rivers, leakage from Turlock Lake, underflow from the Sierra Nevada foothills, and upward seepage from deep geologic fractures (TID 2008).

Groundwater Levels, Flows, and Quality

Groundwater flow direction may be affected by surface topography, hydrology, hydrogeology, soil conditions, and nearby wells. In general, groundwater flow in the Turlock subbasin is towards the southwest (DWR 2006). However, agricultural pumping in the eastern areas of the subbasin has at times resulted in a cone of depression that may alter the flow patterns to an easterly direction (TID 2015). Historic groundwater levels in the basin and in wells near the Project site have varied between eight and forty feet below the ground surface over the last twenty years (DWR 2006, 2020b).

Groundwater in the Turlock subbasin and the City of Turlock area has primarily contaminants related to fuels and associated volatile organic compounds (VOCs) (City of Turlock 2016). Other contaminants found in the City's wells include nitrates, tetrachloroethylene (PCE), chromium, lead, and other heavy metals (City of Turlock 2016). For nitrates in particular, wells may have caused inter-aquifer mixing leading to higher nitrate levels in the deeper aquifers (City of Turlock 2016).

The *Phase I and Limited Phase II Environmental Site Assessment* for the Project site (GEOCON 2019) did not identify any known or likely soils or groundwater contamination onsite within the Project site boundaries. Outside of the Project site boundaries but within the 27-acre project parcel, the Phase 1 identified that soils under a generator formerly used for a fertilizer pump should be removed. These soils have subsequently been removed.

Floodplains, Tsunamis, and Dam Inundation

The Project site is located within a Federal Emergency Management Agency (FEMA) designated area of minimal flood hazard (Zone X) (FEMA 2020). Additionally, the Project site is outside of any tsunami inundation areas (CAL OES 2020). The City of Turlock and the Project site are outside of any dam inundation areas (City of Turlock 2012).

3.10.2 Discussion

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality — *Potentially Significant*

Project Construction

Construction of the Proposed Project would involve ground disturbance that could result in sediments being transported into local storm drainage systems, thereby degrading the quality of receiving waters. Construction would also include the potential storage, use, transport, and/or disposal of hazardous materials (e.g., fuels, oils, solvents) used for construction equipment. Accidental spills of these materials or improper material disposal could pose a risk to the groundwater underlying the spill or disposal area if the materials seep into the soil or groundwater. In addition, ground-disturbing activities (such as deeper excavations for the cremator) during Project construction could potentially expose groundwater, thereby providing a direct pathway by which hazardous materials could enter groundwater and potentially impair its quality. Improper disposal of dewatering effluent could also pose a potential threat to surface water or groundwater quality if the dewatered groundwater was polluted and transported to surface waters or groundwater. Hazardous materials spills on the Project site could affect surface water if they enter the existing stormwater system near the Project site and ultimately were transported to the stormwater system's receiving waterbodies.

As discussed further in Section 3.9, "Hazards and Hazardous Materials," storage or use of hazardous materials for Project construction activities would be limited and would be performed in compliance with all applicable federal, state, and local hazardous materials and hazardous waste regulations. No chemical processing or storage or stockpiling of substantial quantities of hazardous materials would take place at the Project site other than what would be necessary for standard construction activities. Furthermore, CDFA and/or its contractor would dispose of hazardous materials at an appropriate hazardous materials disposal facility or landfill in accordance with all applicable federal, state, and local hazardous materials and hazardous waste regulations.

The Proposed Project also would be required to comply with applicable National Pollutant Discharge Elimination System (NPDES) permits such as the NPDES General Permit for Construction Activities. As part of its compliance with this permit, CDFA

and/or its contractor would prepare a SWPPP and prevent polluted dewatered groundwater from being discharged to surface waters or groundwater. Compliance with these measures would prevent substantial impacts to surface or groundwater quality from occurring. Therefore, this impact would be less than significant.

Operation

As detailed in Chapter 2, Project Description, and Section 3.9, "Hazards and Hazardous Materials," operation of the Proposed Project would include the use and storage of hazardous materials, including fuel and oils, and would generate hazardous wastes from laboratory activities and truck rinse activities. These hazardous materials and wastes could result in an impact on water quality if transported to downstream surface waters (through the stormwater infrastructure) or into soils or groundwater. All hazardous materials would be either contained within the buildings (e.g., solvents used for laboratory cleaning) or have appropriate containment measures. Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment.

Domestic water used for the Proposed Project would be discharged to the City's sewer system, which would treat the effluent before discharge to the San Joaquin River. As a result, such effluent would not be expected to violate water quality standards or otherwise degrade water quality. The Proposed Project may generate laboratory wastewater that cannot be accepted by the City's wastewater treatment system. Until approval is sought and received from the City on its ability to accept the laboratory wastewater, this impact would be **potentially significant**. This impact will be further evaluation in the EIR.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin – *Potentially Significant*

The Proposed Project would develop roughly 7 acres within the 27-acre site. Approximately 5 acres of this development would be impervious surfaces; the remainder of the site would be unpaved, such as for landscaping and stormwater management. These area quantities are subject to change pending final design. Addition of impervious surfaces can reduce groundwater recharge by preventing water falling on the site as precipitation from infiltrating into the soil and groundwater below.

As described above, recharge in the Turlock subbasin occurs primarily through agricultural and urban irrigation. Although the Proposed Project may result in the creation of approximately 5 acres of impervious surfaces and a corresponding reduction in recharge in this specific area from previous agricultural irrigation or precipitation sources, it would not substantially affect overall rates of recharge in the subbasin since it is not in a principal recharge area. Additionally, water falling on landscaped areas of

the Proposed Project site would still have the opportunity to infiltrate into soil and groundwater. Furthermore, because the Proposed Project would not involve the installation of a well or pumping from an existing well on the site, the project would not directly remove any groundwater, and would therefore not conflict with sustainable groundwater management of the Turlock subbasin.

Finally, given that depth to groundwater at the site is likely in the range of 8 to 20 feet bgs, the majority of Proposed Project construction activities are unlikely to encounter substantial quantities of groundwater or require substantial dewatering, so groundwater supplies are unlikely to decrease in this way. Some dewatering may be required for the potential deeper excavation activities associated with the cremator construction but would not be anticipated to substantially reduce the groundwater supplies. Construction-related water demands for dust control over the anticipated 22-month construction period would be met using water trucks. While the source of water provided by the water trucks could derive from groundwater, the amount of water used during construction would not be sufficient to substantially affect regional groundwater supplies.

Proposed Project water demands during operation would be met using the City's municipal water supplies, which are derived from groundwater, as described in Section 3.19, "Utilities and Service Systems." As discussed in Section 3.11, "Land Use and Planning," the Proposed Project would use water-efficient Leadership in Energy & Environmental Design (LEED) practices and technologies and would be consistent with applicable land use designations and general plan policies. The Turlock subbasin is a DWR-designated high priority groundwater basin with the potential for an existing cumulative impact. Further coordination between CDFA and the City will be needed to confirm that the City has sufficient water supplies to support the Proposed Project. Therefore, Proposed Project water demands would **potentially significantly** impact groundwater water supplies or exceed the City's anticipated water demands from planned development. This impact will be further evaluated in the EIR.

c. Substantially alter the existing drainage pattern through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation; increase the rate or amount of surface runoff resulting in flooding; create or contribute runoff water which would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows—*Less than Significant*

Development of the Proposed Project would involve ground-disturbing construction activities and the creation of impermeable surfaces, both of which would alter the existing drainage pattern of the site. During construction, clearing, vegetation removal, grading, and other ground-disturbing activities would expose soils within the Project site

and alter the on-site drainage patterns, thereby potentially increasing on-site susceptibility to erosion. As described in Criterion a above, however, the Project would be subject to the NPDES General Construction Permit, which would require preparation and implementation of a SWPPP, including measures to prevent erosion and siltation. As such, impacts associated with erosion and siltation from construction site stormwater discharges would be avoided or minimized.

Although no streams or other surface waters are present within the Project site, the Proposed Project would include construction-related grading activities and the development of impermeable surfaces that would alter the Project site's existing drainage patterns; however, the Proposed Project's stormwater infrastructure would ensure that the rate or amount of surface runoff from the Project site would be reduced before discharge to the existing stormwater infrastructure. Thus, the Proposed Project would not result in flooding on- or off-site and would not impede or redirect flows.

The Proposed Project would create 5 acres of impermeable surfaces, which could alter or increase the Project site's runoff flow patterns and quantities. In addition, during Project operation, vehicular use of the Project's parking areas could result in the transfer of pollutants (such as fuels and oils) onto the parking area surface, which could potentially be flushed into local stormwater drainages and, ultimately, into surface waters.

The design of the Proposed Project would include infrastructure to capture on-site runoff flows to avoid the potential for flooding and provide water quality treatment before discharging captured runoff into the existing City's stormwater system and ultimately into the receiving surface waters. The Proposed Project's stormwater infrastructure is anticipated to include, but would not be limited to, a stormwater detention basin as well as stormwater retention swales on the Project site. In addition, applicable state water quality regulations would require implementation of BMPs and other post-construction measures to minimize the discharge of pollutants into the City's MS4 system, as described in the Phase II NPDES MS4 Permit. BMPs applicable to the Proposed Project would include source control; low-impact development; and structural and non-structural BMPs, as defined in the Phase II NPDES MS4 Permit (Order No. WQ Order 2013-0001-DWQ as amended by Orders WQ 2015-0133-EXEC, WQ 2016-0069-EXEC, WQ 2018-0001-EXEC, and WQ 2018-0007-EXEC). Inclusion of these features would avoid or minimize the potential impacts described above.

Therefore, the proposed project would not substantially alter the existing drainage pattern through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation; increase the rate or amount of surface runoff resulting in flooding; create or contribute runoff water which would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. As a result, this impact would be **less than significant**.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation – *No Impact*

As mentioned above, the Proposed Project site is located within a FEMA designated area of minimal flood hazard. The Proposed Project site is not downstream of any large standing bodies of water in which a seiche could occur and is not within a tsunami-inundation area. Therefore, the potential to risk release of pollutants due to project inundation is low to nonexistent. As such, there would be **no impact**.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan – *Potentially Significant*

The Proposed Project involves the construction and operation of a replacement laboratory facility and associated improvements. As stated above, the Proposed Project would connect to and discharge domestic and laboratory wastewater to the City's wastewater collection and treatment system, and, ultimately to the San Joaquin River through the wastewater treatment plant's treated effluent discharges. Although the City receives other industrial waste streams to its wastewater treatment plant, confirmation is needed from the City that the Project's anticipated laboratory wastewater stream would not cause an exceedance or comply issue with the City's NPDES requirements for its wastewater treatment plant, and subsequently affect the RWQCB's water quality control plan for the San Joaquin River.

The Proposed Project would rely on the City's water supplies, which are entirely derived from groundwater. In its General Plan, the City identified that without implementation of a planned surface water supply project, the City would not have sufficient water supplies to meet all of the demands associated with its planned population growth (City of Turlock 2012). The Proposed Project would be required to obtain LEED silver certification and would feature water-efficient fittings and fixtures to conserve water. In this regard, the new facility would likely be more water-efficient than the existing Turlock Laboratory facility. However, any new water demands associated with the Proposed Project may contribute to an existing groundwater supply impact. Although the Turlock Subbasin does not yet have an approved sustainable groundwater management plan, implementation of the Proposed Project in addition to other water demands in the City could cause the City to exceed its water supplies or conflict with implementation of a sustainable groundwater management plan. This would be a **potentially significant** impact and will be evaluated further in the EIR.

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3.11 LAND USE AND PLANNING

Significance criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. Physically divide an established community?	☐	☐	☒
b. 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 an environmental effect?	☐	☒	☐

3.11.1 Environmental Setting

The Proposed Project site is located within the existing Sphere of Influence of the City of Turlock in Stanislaus County. In March 2020, CDFA purchased the 27-acre parcel of land where the Proposed Project site will be located. Prior to CDFA's purchase of the land, the entire parcel was used for agricultural row crops. The site is currently designated Prime Farmland. The Project site's local land use and zoning designation is Office and Office Commercial, respectively (City of Turlock 2014, 2012). The 2006 Westside Industrial Specific Plan (WISP), a specific plan used by the City of Turlock that focuses on non-residential development and includes the Proposed Project site, designates the site as Heavy Commercial (City of Turlock 2006). Surrounding land uses include rural residences to the west, Hwy 99, commercial development, and residences to the east, an active orchard to the north, and TID Lateral Canal, detention pond, and commercial development to the south.

3.11.2 Discussion

a. Divide an established community – *No Impact*

The Project involves construction of a full-service laboratory, offices, necropsy facility, and associated improvements on a site recently purchased by CDFA and previously used for agricultural row crops. Some off-site utility infrastructure improvements may be needed to serve the site; these would be provided through connection to the City of Turlock's, PG&E's, and/or Turlock Irrigation District's existing infrastructure. These connections would generally be underground and occur along Dianne Drive and the Proposed Project site. The Project would not divide any portion of the City of Turlock's community or the adjacent rural-residential neighborhood, nor disrupt any adjacent land uses. Therefore, there would be **no impact** associated with division of an established community.

b. 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 an environmental effect – *Less than Significant*

The Proposed Project would be located on land purchased by CDFA in March 2020. As such, development activities on state-owned land are exempt from local laws, regulations, and policies. However, activities associated with the Proposed Project that are not located on the Project site (e.g., utility connections within the City of Turlock's, PG&E's, and TID's rights-of-way or easements along Dianne Drive) are not exempt and may be subject to local regulations. The proposed required utility connections would mostly occur underground and would not conflict with existing connections already in place. Nevertheless, CDFA seeks to coordinate with local jurisdictions to reduce any physical consequences or potential land use conflicts to the extent feasible.

The Proposed Project site is designated as Office in the City of Turlock's General Plan and is zoned Office Commercial. The Proposed Project will occur within an area covered by the City's WISP and has a land use designation of Heavy Commercial. The WISP was prepared by the City of Turlock to facilitate economic and job development in an area proposed for primarily industrial uses. However, the WISP also accommodates for office and "flex space" industrial/office uses, including business professional and commercial building types. The WISP implements the policies that were established in the City of Turlock's General Plan. The Proposed Project would be compatible with the WISP, as laboratories are a permitted use on lands designated as Heavy Commercial with "Minor Administrative Approval[3]."

Based on the information provided above regarding land uses, the Proposed Project would not result in any conflicts with applicable land use plans, policies, or regulations; the impact would be **less than significant.**

[3] Section 9-5-301 of the City of Turlock's Zoning Ordinance states that minor administrative approvals are those which are routine in nature and do not require a public hearing, but may require an administrative interpretation regarding compliance with established policies, standards, and guidelines adopted by the Turlock City Council.

3.12 MINERAL RESOURCES

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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?	☒	☐	☐
b. 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?	☐	☐	☒

3.12.1 Environmental Setting

Under CEQA, mineral resources generally refer to aggregate material throughout the state of California that contains regionally significant minerals as determined by their classification of Mineral Resource Zone values (discussed below). Sand and gravel (aggregate) are the primary extractive mineral resources within Stanislaus County (County of Stanislaus 2016). Minerals found throughout Stanislaus County include bementite, braunite, chromite, cinnabar, garnet, gypsum, hausmannite, hydromagnesite, inesite, magnesite, psilomelane, pyrobrsite, rhodochrosite, and small deposits of gold, clay, and lead (County of Stanislaus 1994-2016).

Mineral Resource Zone (MRZ) classifications are defined as follows (County of Stanislaus 2016):

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ-4: Areas where available information is adequate for assignment into any other MRZ.

The Project area is designated by the CGS as a MRZ-3a. MRZ-3a areas contain known mineral occurrences of undetermined mineral resource significance[4] (CDOC 1993). Furthermore, the Proposed Project site is located in a zone that consists of Pliocene and younger alluvium (MRZ-3a$^{sg(C14)}$) containing sedimentary rocks classified as predominantly fine- and coarse-grained alluvium (CDOC 1993). The MRZ-3a$^{sg(C14)}$ zone includes the following sedimentary formations: Laguna Formation, the North Merced Gravel, Turlock Lake Formation, Riverbank Formation, Modesto Formation, and post Modesto-alluvium. These sediment formations have drained from the Sierra Nevada during the past 4 million years and have formed elevated river terraces and alluvial fan deposits (CDOC 1993). Generally, the uppermost 30-50 feet of alluvium within the MRZ-3a$^{sg(C14)}$ zone is composed of sand, silt, and clay with lesser amounts of pea gravel and pebbles.

The nearest mining operations are located near the Merced River and the city of Delhi. Two of the mines have been closed and reclaimed and one is an active mine. All three mines were/are used for sand and gravel excavation:

- The Morrison and Morrison Sand Mine (Mine ID: 91-24-0046) is located approximately 6 miles southeast of the Proposed Project site near Letteau Avenue in the city of Delhi. The mine was permitted for 17 acres and was owned and operated by Morrison & Morrison. As of report year 2010, mining operations are closed and reclamation has been certified as complete by the lead agency for this mine, the County of Merced (CDOC 2020a).

- The BMD Excavation (Mine ID: 91-24-0022) is an open pit operation located approximately 7 miles southeast of the Proposed Project site near Griffith Avenue in the city of Delhi. The mine was permitted for 65 acres and was owned and operated by Bettencourt & Mason Dairy. As of report year 2001, mining operations are reclaimed and the reclamation has been certified complete by the lead agency for this mine, the county of Merced (CDOC 2020b).

- The Green Pit (Mine ID: 91-50-0021) is an open pit active mine located approximately 8.5 miles southwest of the Proposed Project site near the Merced River. The site is permitted for approximately 27 acres and is owned and operated by CalMat, Inc./Vulcan Materials Company. As of report year 2019, the mine is still active, and reclamation is in progress (CDOC 2020c).

[4] To be considered significant for the purpose of Mineral Land Classification, a mineral deposit, or a group of mineral deposits that can be mined as a unit, must be actively mined under a valid permit or meet marketability and threshold value criteria adopted by the California State Mining and Geology Board (SMGB).

Two oil and gas wells are located within 1.5 mile of the Project site:

- Well #10-1 located northeast of the Proposed Project site on the southern border of Rotary International Park is operated by Mobil Oil Exploration & Production North America, Inc. It is no longer in use and has been plugged and abandoned (CDOC 2020d).

- Well #1 located southwest of the Proposed Project site and West Main Street and east of South Washington Road. The well is operated by L & B Oil Co., and it has been plugged and abandoned (CDOC 2020e).

3.12.2 Discussion

a. Result in the Loss of Availability of a Known Mineral Resource – *Potentially Significant*

Based on MRZ data for the land surrounding the Project site, the Project site area is comprised of sedimentary formations consisting of sand, gravel, silt, and clay materials. Sand and gravel can be used for concrete for road and building construction and would potentially be considered significant mineral commodities. Although the sources of where most gravel and sand used in the road and construction industry have been found are in mining operations near the Merced and Tuolumne Rivers and Shirley and Hood Creeks, it is unknown if there are sand and gravel deposits within the Proposed Project site that would meet the criteria threshold to be considered significant by the California State Mining and Geology Board (SMGB). Further studies may need to be conducted to identify if any potential sand and gravel deposits exist at the Project site. Impacts to mineral resources within the Project site could be considered **potentially significant** and will be further evaluated in the EIR.

b. Result in the loss of availability of a locally important mineral resource recovery site – *No Impact*

The Project site has not been identified as a locally important mineral recovery site, nor would it interfere with an existing locally important mineral resource recovery site that has been delineated on a local general plan, specific plan, or other land use plan. Additionally, the nearest mining operations are located over 5 miles away from the Proposed Project; therefore, no active or historic mining operations would be affected by the Proposed Project. The Proposed Project would have **no impact** on any locally important mineral resource recovery sites.

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3.13 NOISE

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project result in:			
a. 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?	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	☐	☐	☒

3.13.1 Environmental Setting

Existing Noise Conditions

The Proposed Project site is in Turlock, California, west of Hwy 99. The land use nearby is mostly agricultural. The nearest noise-sensitive land uses to the Proposed Project facilities are rural residences within 50 feet of the western boundary of the Proposed Project site. Noise-sensitive land uses generally consist of those uses where noise exposure would result in adverse effects on uses for which quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise.

The existing noise environment in the project area is primarily influenced by surface-transportation noise emanating from vehicular traffic on Dianne Drive, West Canal Drive, and Hwy 99. Intermittent noise from outdoor activities at the surrounding residences (e.g., people talking, operation of landscaping equipment, car doors slamming, and dogs barking), birds, and wind also influence the existing noise environment.

An ambient noise survey was conducted along the boundary of the Proposed Project site from December 1 through December 2, 2020 to establish existing noise conditions. Ambient noise measurements were conducted near existing noise-sensitive uses (single-family residences) across Dianne Drive from the Proposed Project site (see **Figure 3.13-1**). The results of the noise survey are shown in **Table 3.13-1**. Two short-term measurements (ST-1 and ST-2) were conducted during daytime hours. One long-term (24-hour) measurement was conducted along the boundary of the Proposed Project. As shown in Table 3.13-1, measured ambient noise levels at the noise-sensitive land uses closest to the Proposed Project site range from 54 to 65 a-weighted decibels (dBA) equivalent sound level (L_{eq}), and 68 dBA energy average of the A weighted sound levels occurring during a 24-hour period (L_{dn}).

Figure 3.13-1. Noise Measurement Sites along the perimeter of the North Valley Replacement Laboratory Site

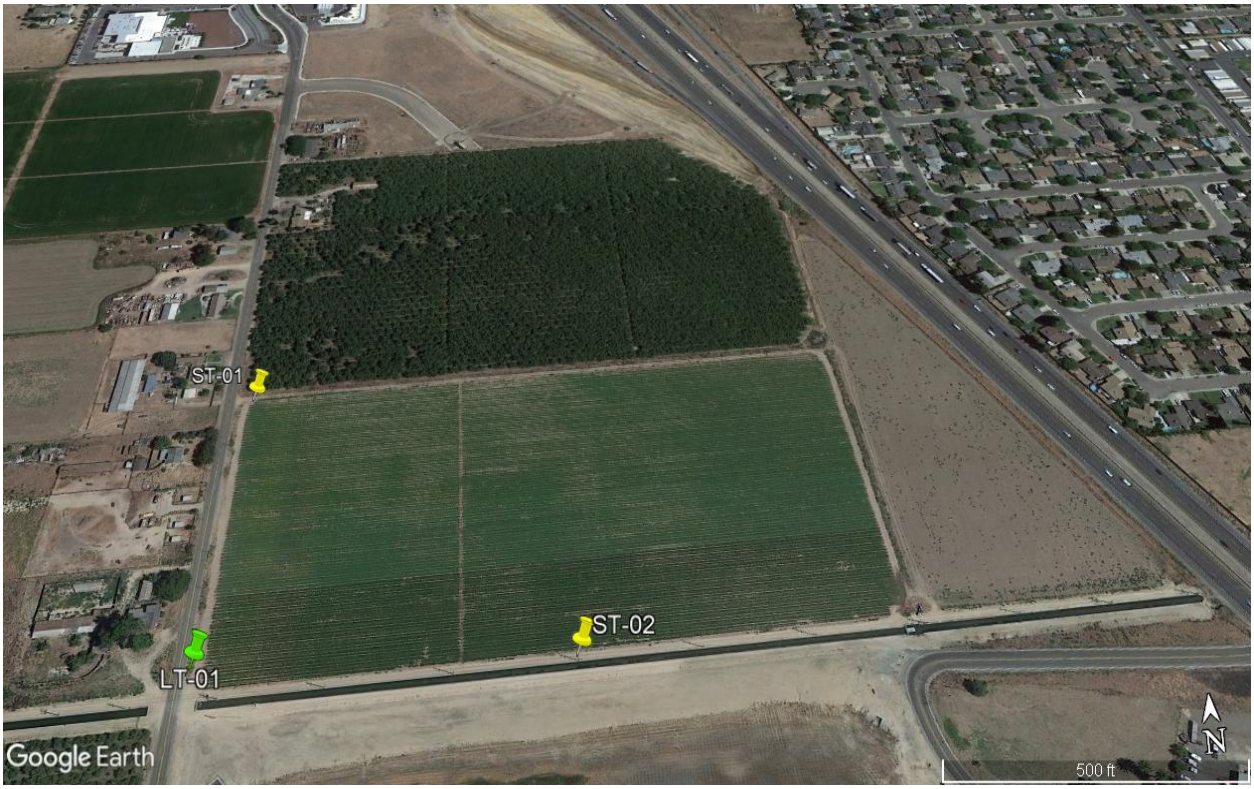


Table 3.13-1. Summary of Measured Ambient Noise Level Survey Results in the Vicinity of the Project Site

Site	Location	Date	Time	Duration	Day L_{eq} (dB)	Day L_{max} (dB)	Night L_{eq} (dB)	Night L_{max} (dB)	L_{den}/ CNEL (dB)
LT-01	Southwest Corner of the Project Site	12-1/2-2020	13:00	24 Hour	65.0	100.6	64.7	100.3	67.5
ST-01	South of the Project Site	12-1-2020	13:28	30 Minutes	53.5	66.9	NA	NA	NA
ST-02	Northwest Corner of the Project Site	12-1-2020	15:56	15 Minutes	65.2	77.5	NA	NA	NA

Notes: L_{eq} = equivalent sound level (the sound energy averaged over a continuous period of time); L_{max} = maximum instantaneous sound level;); L_{den} = day-evening-night noise level;); CNEL = community noise equivalent level; ST = short-term measurement; Day = 7 a.m. – 7 p.m.; Night = 7 p.m. – 7 a.m.

* Measured sound level in decibels

Noise-level measurements were completed using a Larson Davis Laboratories (LDL) Model 820 and 831 precision integrating sound-level meter. The meter was calibrated before the measurements using an LDL Model CAL200 acoustical calibrator. The meter was programmed to recorded A-weighted sound levels using a "slow" response. The equipment used complies with all pertinent requirements of the American National Standards Institute for Class 1 sound-level meters (ANSI S1.4).

*Source: Data measured and compiled by AECOM in 2020 (**Appendix B,** Noise Monitoring Data and Analysis).*

Noise Standards and Regulations

The state is constitutionally autonomous and exempt from municipal policies and regulations. Nevertheless, these regulations may be used at a state agency's discretion to evaluate the compatibility and effects of state projects on local land uses. Accordingly, relevant information from the City of Turlock is summarized below. The 2012 Turlock General Plan addresses noise in Chapter 9 with its noise element. "It (the noise element) guides the location of industrial land uses and transportation facilities since they are common sources of excessive noise levels. This element also guides the location of particularly noise-sensitive uses, such as residences, schools, churches, and hospitals, so that they may be less affected by noise." The City's guiding policies are identified below and are relevant for municipal and private projects within the city limits.

> **Policy 9.4-a Land Use Compatibility:** Ensure that new development is compatible with the noise environment, by continuing to use potential noise exposure as a criterion in land use planning.
>
> **Policy 9.4-b Prevent Degradation of Noise Environment:** Protect public health and welfare by eliminating existing noise problems where feasible, maintaining an acceptable indoor and outdoor acoustic environment, and preventing significant degradation of the acoustic environment.
>
> **Policy 9.4-c Protect Residential Areas and Sensitive Uses:** Minimize excessive noise exposure in residential areas and the vicinity of such uses as schools, hospitals, and senior care facilities.
>
> **Policy 9.4-h Non-Transportation Noise Sources—Required Mitigation:** Require mitigation of noise created by new proposed non-transportation noise sources so that it does not exceed the noise level standards of 60 decibel (dB) CNEL for residential outdoor areas and 45 dBA CNEL for interior uses as measured immediately within the property line of lands designated for noise-sensitive uses. Appropriate mitigation measures include: dampen or actively cancel noise sources; increase setbacks for noise sources from adjacent dwellings; use soundproofing materials and double-glazed windows; screen and control noise sources, such as parking and loading facilities, outdoor activities, and mechanical equipment; use open space, building orientation and design, landscaping and running water to mask sounds; and control hours of operation, including deliveries and trash pickup.

The Turlock Municipal Code Title 9, Chapter 9-2, Article 3, Sections 9-2-301 through 9-2-315 defines noise standards for the City. The City's exterior noise limits (Levels Not to Be Exceeded More Than 30 Minutes in Any Hour) for residential uses (One- and Two-Family) are 60 dBA during the daytime hours (7:00 a.m. – 10:00 p.m.), and 50 dBA during the nighttime hours (10:00 p.m. – 7:00 a.m.). As shown in Table 3.13-1, the existing ambient conditions (68 dBA CNEL, represented by LT-01) at the nearest noise-sensitive uses to the Proposed Project site already exceed the exterior noise limits due to the traffic and proximity of Hwy 99 and Dianne Drive.

The city's noise ordinance establishes maximum allowable sound levels for repetitively scheduled and relatively long-term operation of stationary construction equipment at 70 dBA and 60 dBA during weekdays and weekends\holidays, respectively, near residential uses. Maximum allowable sound levels for nonscheduled, intermittent, short term operation of mobile construction equipment is 75 dBA and 70 dBA during weekdays and weekends\holidays, respectively, near residential uses.

Operating or permitting the operation of any device which creates a vibration that annoys or disturbs at least two (2) or more reasonable persons of normal sensitivity who reside in separate residences (including apartments and condominiums) at or beyond the property boundary of the source. When the source is located on a public space or in the public right-of-way, the affected residence shall be located at least one hundred fifty (150) feet (forty-six [46] meters) from the source.

3.13.2 Discussion

a. 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 – *Potentially Significant*

The Proposed Project would increase existing noise levels associated with the development of the property. Typical ongoing noise would most likely be generated by mechanical equipment such as on-site machinery, and heating, ventilation, and air-conditioning equipment. The standards of Turlock's Noise Ordinance are used for this analysis to assess noise from the Proposed Project during construction and occupancy.

Construction activities would involve site grading, clearing, and excavation, and building construction as well as paving. Typical construction equipment and vehicles would be used, including backhoe, excavator, jackhammers, saw cutter, skid loader, compactor/roller, asphalt paver, side boom, milling (grinding) machine, concrete trucks, dump trucks, delivery trucks, water trucks, pickup trucks, and electrical generators. Staging areas for materials and equipment would be provided within the Proposed Project site. Trucking for delivery and disposal of materials would occur throughout the construction period. The nearest noise-sensitive uses to the construction activities for

the Proposed Project are approximately 50 feet west from the Proposed Project site. Because of the proximity of these residences along Dianne Drive, the intensity and duration of construction, the types of construction equipment, and the noise limits in the City's noise ordinance, project construction could result in a substantial increase over ambient conditions and adversely affect the nearby residences.

Post construction, the Proposed Project's stationary equipment and vehicle travel would introduce a new source of noise. As described earlier, existing ambient conditions already exceed the City's exterior noise standard for residential uses in the project vicinity, and new noise sources at the Proposed Project site could exacerbate that exceedance.

Because there could be **potentially significant** construction and operational noise and impacts, this topic will be further evaluated in the EIR.

b. Generation of excessive groundborne vibration or groundborne noise level – *Less-than-Significant*

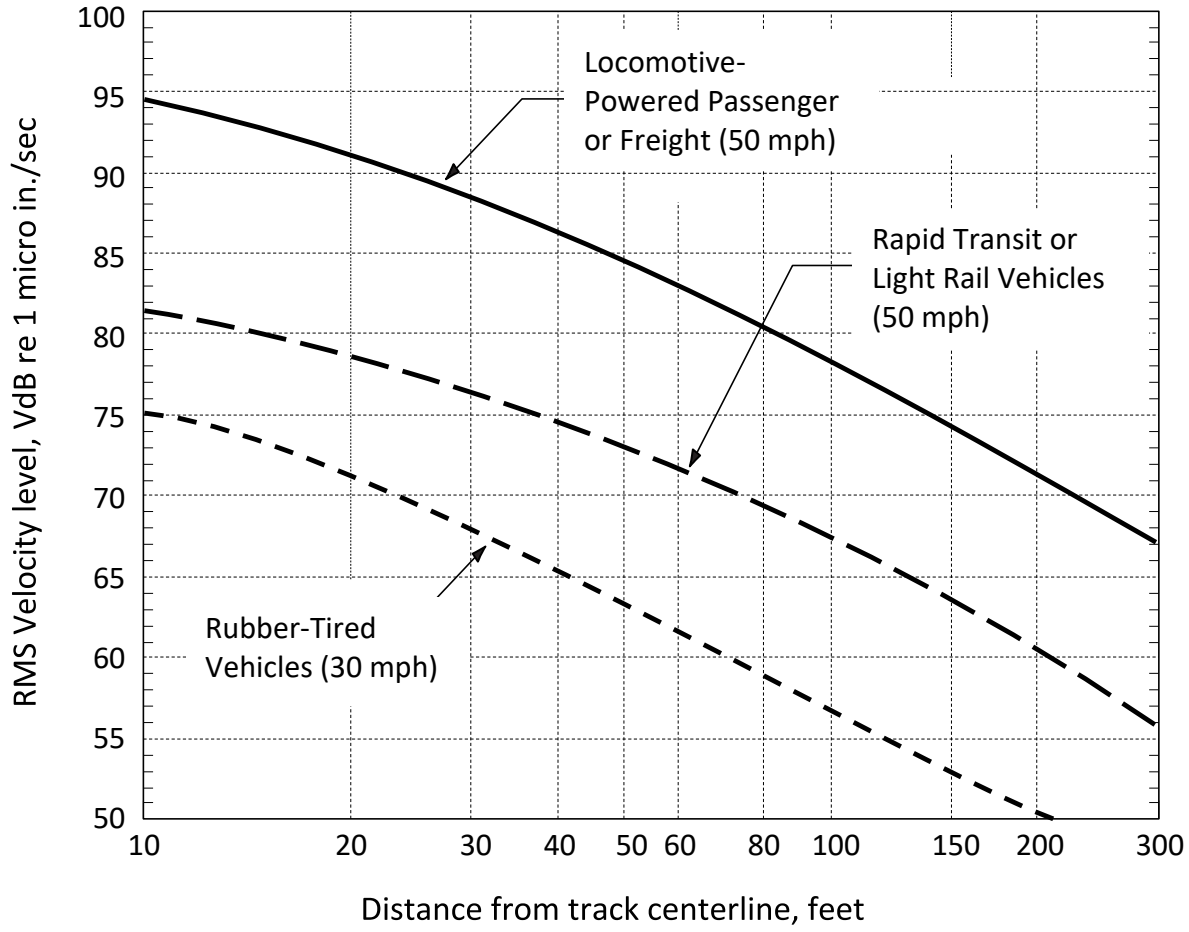
The movement and operation of the project's construction equipment may generate temporary ground-borne vibration. The Caltrans has developed criteria for avoiding human annoyance and for avoiding potential structural damage to adjacent buildings. These Caltrans standards are commonly applied as an industry standard to determine the impacts of project vibration relative to human annoyance and structural damage. Caltrans determines that the vibration level of 80 vibration decibels (VdB) (0.04 inches per second (in/sec) peak particle velocity (PPV)) would be distinctly perceptible. Therefore, remaining less than 80 VdB at residential uses would avoid human annoyance. Also, Caltrans recommends staying below 0.5 in/sec PPV at older residential structures to avoid structural damage (Caltrans 2020).

The vibration level associated with the use of a large bulldozer is 0.089 in/sec PPV (87 VdB) at 25 feet (Federal Transit Administration [FTA] 2018). The nearest vibration-sensitive uses (buildings) to the construction sites are approximately 50 feet. At these distances, the most substantial vibration generated by project construction equipment would attenuate to less than 78 VdB and 0.031 in/sec PPV, less than the criteria of 80 VdB and 0.5 in/sec PPV recommended by Caltrans. The vibration generated by equipment is not anticipated to be excessive or significant. Therefore, short-term construction of the project would not expose persons to or generate excessive ground-borne noise or vibration. For these reasons, this impact would be less than significant.

Once construction is completed and the replacement laboratory is operational, the project would introduce a new source of vibration associated with the facility activities. These activities would include truck deliveries to the Proposed Project site, which would be considered as a permanent source of vibration at the nearby vibration-sensitive uses (single-family residences) across Dianne Drive from the Proposed Project site. However,

vibration from rubber-tired traffic is barely perceptible (FTA 2018). The delivery trucks would travel by the existing vibration-sensitive uses at lower speeds of up to 30 miles per hour as the trucks enter or exit the Proposed Project site and travel along Dianne Drive. Based on FTA data, and as shown in **Figure 3.13-2**, rubber-tired vehicles operating at 30 miles per hour (mph) would generate groundborne vibration of approximately 0.01 PPV (64 VdB) at a distance of 50 feet from the roadway centerline, less than the criteria of 80 VdB and 0.5 in/sec PPV recommended by Caltrans. Therefore, this impact would be **less than significant**.

Figure 3.13-2 Generalized Ground-Surface Vibration Curves



Note: mph = miles per hour; RMS = root-mean square; in/sec = inches per second; VdB = vibration decibels

Source: FTA 2018, adapted by AECOM in 2018

c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels – *No Impact*

The Proposed Project site is not located within two miles of a public airport or public use airport. A private airstrip, Turlock Airpark, is located 2.6 miles to the southeast of the Proposed Project site. No airports or airstrips would be used by the Proposed Project under construction or operation. Also, the Proposed Project would not be impacted by noise from the operations of any public or private airport, it and would not expose people working in the Proposed Project site to excessive noise levels. Therefore, **no impact** would occur.

3.14 POPULATION AND HOUSING

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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)?	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒

3.14.1 Environmental Setting

The City of Turlock's population is currently estimated at 73,631 as of July 1, 2019, a 7.2 percent increase from April 1, 2010 (U.S. Census Bureau 2019a). The population is forecasted to reach 29,462 by 2030 (Kimley Horn 2018). There are approximately 26,517 housing units in Turlock, with approximately 25,718 units occupied (U.S. Census Bureau 2019b, citing 2019 American Community Survey). The current combined homeowner and renter vacancy rate is approximately 3.0 percent. Housing in Turlock is projected to grow to 30,935 units by 2030 (Kimley Horn 2018).

The majority of jobs in Turlock are in the educational services, health care, and social assistance industry, which together accounted for 23.4 percent of the workforce in 2017 (U.S. Census Bureau 2019c, citing 2017 American Community Survey). Other large industries include retail trade and manufacturing.

The Project site is located west of Hwy 99 along the northeast corner of Dianne Drive and West Canal Drive on land owned by the CDFA. Rural residences are located directly west of Dianne Drive, and a residential neighborhood containing low-density single-family homes is located on the east side of Hwy 99. An almond orchard is located to the north; TID Lateral Canal, a detention basin, and commercial businesses are located to the south. Prior to CDFA's purchase of the land in March 2020, the Project site was used to grow agricultural row crops. The Project site is within the city limits of Turlock in Stanislaus County.

3.14.2 Discussion

a. Induce population growth – *Less than Significant*

Two CDFA field offices, the Animal Health Branch (AHB) Modesto District Branch and the Stockton Regional Office of the Milk and Dairy Food Safety (MDFS), as well as the

California Health and Food Safety (CAHFS) Turlock Laboratory would relocate under the Proposed Project. The Proposed Project is projected to have 29 CAHFS employees (17 existing staff and 12 new staff), and 27 employees (all existing staff) from the CDFA offices for a total combined staff of 59 employees. CDFA staff from both the Modesto and Stockton offices would be able to commute to the proposed new CDFA Turlock North Valley Laboratory without having to relocate if desired. Staff from the existing CAHFS Turlock Laboratory would travel approximately the same distance to the Proposed Project as they would to the existing Turlock Laboratory. If a portion of the 27 CDFA employees were to move to Turlock, in addition to the 12 new CAHFS employees, there would be a minor increase in the local population. As described in Section 3.14.1, the City of Turlock's population is expected to increase. In addition, the City has a vacancy rate of 3.0 percent, indicating that sufficient housing is available to meet the minor increase in the local population, if needed.

The Proposed Project would not involve any activities that would increase population indirectly, such as by removing an obstacle to growth. It is expected that the existing Turlock Laboratory site would be decommissioned for future use as State-owned surplus building and potentially auctioned if there is no other State use for the property.

It is expected that the regional labor force would be sufficient to meet the construction workforce demand associated with the Proposed Project. While some workers may temporarily relocate from other areas, the resulting population increase would be minor and temporary. As a result, this impact would be **less than significant.**

b. Displace a substantial number of existing housing or people – *No Impact*

The Project site is vacant of housing units and would not displace any existing housing units or people. The Proposed Project would not require construction of any replacement housing. Furthermore, all Proposed Project facilities would be constructed within the 7-acre site boundary, or, for the utility connection areas, within or adjacent to the site and would not displace any existing housing. As a result, **no impact** would occur.

3.15 PUBLIC SERVICES

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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 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?	☐	☒	☐
v. Other public facilities?	☐	☒	☐

3.15.1 Environmental Setting

Fire Protection

Fire protection services for the City of Turlock are provided by the Turlock Fire Department (TFD), which has four fire stations throughout the city. Each station is staffed with a minimum of three firefighters who rotate 48-hour shifts, 365 days a year (City of Turlock 2020a). The TFD has a total of 8 fire apparatus that carry firefighting equipment, auto extrication equipment, tools to help mitigate various types of emergencies, and EMS equipment, including defibrillators. Currently, TFD employs 100 trained staff members, and consists of three divisions: Operation, Training, and Prevention.

In 2019, the Turlock Fire Department responded to 7,163 calls for emergency. The average emergency response time was 5 minutes 1 second (TFD 2019). The Proposed Project would be served by TFD's Fire Station 32, located at 791 S. Walnut Road, Turlock, CA 95380 (approximately 1 mile southeast of the Project site).

Police Protection

Law enforcement services at the Project site are provided by the Turlock Police Department (TPD), which is divided into five beats and serves a population of 73,874 within 16.88 square miles. The police station is located at 244 North Broadway, Turlock CA 95380 (approximately 1.4 miles southeast of the Project site). The TPD is composed of two divisions consisting of 78 sworn police officers and 66 non-sworn part-time and full-time civilian employees (City of Turlock 2020b). **Table 3.15-1** provides the TPD's Uniform Crime Reporting (U.C.R) statistics for the City of Turlock.

Table 3.15-1. 2019 Crime Statistics for the City of Turlock

Crime	Number of Reports
Homicide	0
Forcible Rape	28
Robbery	137
Aggravated Assault	261
Burglary	402
Larceny-Theft	1,488
Motor Vehicle Theft	441

Source: TPD 2019

Schools

The City of Turlock, including the area in the vicinity of the Project site, is mostly served by the Turlock Unified School District (TUSD). Small portions of the City in the northeast, southwest and northwest are served by Denair, Chatom, and Keyes Unified School Districts.

The TUSD has nine elementary schools, two middle/junior high schools, three high schools, one alternative education school, one adult school, and has a total enrollment of approximately 14,000 students, with a staff of 1,500 employees (TUSD 2020). The nearest schools to the Project site are Brown Elementary (1-mile northeast), Crowell Elementary (1.5 miles northeast), and Turlock Junior High School (1.5 miles northeast). The Roselawn Continuation School is proposed to move to a location near North Kilroy Road and West Main Street in December 2020; this location is approximately 0.4 mile south of the Project site (pers. comm. Gordon and Dutra 2020).

In addition to the public schools, there are six private schools in the City of Turlock, including one serving elementary students, three serving elementary and middle school students, one serving middle and high school students, and one serving grades 4 through 12 (City of Turlock 2012).

California State University, Stanislaus (CSUS) is also located within the City of Turlock. CSUS spans a 228-acre campus and has a student body of more than 10,000 between the Turlock and Stockton campus (CSUS 2020).

Parks

The City of Turlock contains 41 public parks encompassing 249 acres, and 6 recreational corridors. The Project site is located within 1 mile of five city parks. The closest parks, Centennial Park and Summerfaire Park, are located approximately 0.6 mile northeast and east from the site, respectively. Both parks offer open space, playgrounds, picnic areas, barbeques and walking paths. Additionally, Centennial Park contains a dog park and the Centennial Celebration Memorial Tree, and Summerfaire Park contains a basketball court. See Section 3.16, "Recreation," for more information on parks in the vicinity of the Project site.

The detention basin located south of the Proposed Project site has been designed for dual-use to coincide with the City's park system, and has the potential to be used as a recreational facility. Currently, the detention basin is being used to hold runoff from stormwater events.

Other Public Facilities

The Proposed Project is approximately 0.80 mile west of the Stanislaus County Fairgrounds, and approximately 1.70 miles west of Turlock City Hall. The Turlock Public Library is approximately 2 miles southeast of the Project site, and the nearest medical center is Sutter Urgent Care on W. Christoffersen Parkway, approximately 2 miles northeast.

3.15.2 Discussion

a. Result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities

The Proposed Project would involve construction and operation of a laboratory facility, offices, and associated improvements to provide an adequate workspace, equipment storage, and vehicle parking for an increasing number of employees. The Proposed Project would be located on land purchased by CDFA in 2020. The Project would be located on a relatively flat parcel that has been used to grow agricultural crops. The site does not contain any existing structures other than a fertilizer pump and contains some scattered ruderal vegetation. As mentioned above, the Proposed Project would include a laboratory and office building, as well as a cremator, secured and visitor parking areas, utility improvements, and other ancillary improvements.

The physical environmental impacts of the Proposed Project are discussed throughout this document and are therefore not discussed here. The Proposed Project would not require closure of any public facilities during construction. However, because the improvements would involve the use of construction equipment as well as an increase

of personnel to the Project area during construction and operation, the Proposed Project could marginally increase the demand on public services. Potential impacts from the Proposed Project on specific public services are discussed below. Section 3.17, "Transportation," provides an evaluation of the Project's construction potential to impede public services as a result of truck trips and construction-related traffic.

i. Fire protection – *Less than Significant*

Construction activities on the Project site would take place on undeveloped land that is unpaved and contains scattered ruderal vegetation throughout the site and along the Project site borders. Operation of power tools and equipment during Project construction could potentially provide an ignition source and increase fire-risk in the area. Storage of flammable materials (e.g., fuel) during Project construction could also increase fire risk. However, Project construction activities would follow the requirements for fire safety during construction contained in the California Fire Code and the California Public Resources code. Adherence to the requirements of the California Fire Code would reduce the potential increase in fire risk during Project construction to a less-than-significant level.

As described in Chapter 2, *Project Description*, and in Section 3.9, "Hazards and Hazardous Materials," the Proposed Project would include on-site storage of flammable materials. A subbase fuel tank will be kept onsite and will be used to operate the onsite emergency generator.

The Proposed Project would be equipped with fire hydrants that would meet the applicable requirements of the California Building Code, California Fire Code. A hydraulically-calculated sprinkler system would be installed, and all buildings would be protected per National Fire Protection Association (NFPA) 13. The additional employees associated with the Proposed Project would not generate substantial demand for fire protection, significantly affect average response times or other performance metrics, or require provision of new fire protection facilities. This impact would be **less than significant**.

ii. Police protection – *Less than Significant*

Construction and operation of the Proposed Project would not generate substantial demand for police protection, significantly affect average response times or other performance metrics, or require provision of new police protection facilities. This impact would be **less than significant.**

iii. Schools – *Less than Significant*

The nearest school is Brown Elementary, which is located 1-mile northeast of the Project site. The Project would not impact existing school facilities, nor would it

contribute to a substantial change in population that would require construction of new schools. There would be **no impact** to existing schools.

iv. Parks – *Less than Significant*

The Proposed Project would not involve construction of any parks or recreational facilities, and it would not displace any existing parks or recreational facilities. No existing parks or recreational facilities are located on the Project site. Likewise, Project construction would not require the temporary closure of any nearby parks or recreational facilities, or otherwise affect the access or use of such facilities. The small potential increase in population resulting from the Proposed Project could marginally increase the demand for parks but would not require construction of new parks or recreational facilities. As a result, this impact would be **less than significant**.

v. Other Public Facilities – *Less than Significant*

Project construction activities (e.g., equipment movement, materials and waste hauling) could potentially cause temporary local traffic delays in the area, which may marginally decrease ease of access to the Sutter Urgent Care medical facility located at 3100 W. Christoffersen Parkway (see Section 3.17, "Transportation," for additional discussion of Project traffic impacts) and other public facilities discussed above. However, these potential impacts would not be significant and would not require or result in the need to construct new or expanded public facilities. This impact would be **less than significant**.

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3.16 RECREATION

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. 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?	☐	☒	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒

3.16.1 Environmental Setting

Parks and recreational areas in the City of Turlock encompassed 249 acres, as of 2010 (City of Turlock 2012). These recreation spaces are operated by the City. Additionally, the City has community recreation facilities and opportunities, such as sports complexes and fields, basketball and volleyball courts, dual-use storm drainage basins that coincide with the parks systems, recreation corridors (Greenway System), cultural facilities (arts center, library), and community centers that also serve the city. The Stanislaus County Fairgrounds are also located within the City of Turlock.

There are 5 parks and the Stanislaus County Fairgrounds within 1 mile of the Project site. The parks are owned and maintained by the City of Turlock. Additionally, the detention basin that is located directly south of TID Lateral Number 4 has been designed for dual-use to coincide with the City's park system, and will be used as a recreation facility in the future (City of Turlock 2006). **Table** 3.16-1 lists the recreation facilities and their proximity to the Project.

Table 3.16-1. Parks and Recreational Facilities in the Vicinity of the Proposed Project

Park/Facility Name	Ownership	Approximate Distance from Proposed Project Site (aerial miles)	Features
Pedretti Park	City of Turlock	0.85-mile northwest	5-field baseball and softball complex
Centennial Park	City of Turlock	0.60-mile northeast	Open space for play, playground, dog park, walking paths, picnic area, barbeques, Centennial Celebration Memorial Tree
Soderquist Park	City of Turlock	0.80-mile southeast	Open space for play, ballfield
Summerfaire Park	City of Turlock	0.60-mile east	Open space for play, playground, picnic area, barbeques, basketball court, walking paths
Stanislaus County Fairgrounds	State of California	0.80-mile east	County Fair, events, picnic areas, meetings, RV camping
Osborn Elementary School	City of Turlock/Turlock Unified School District	0.80-mile southeast	Open space for play, playgrounds, running track

Source: City of Turlock 2012

3.16.2 Discussion

a. Increase use of existing parks or recreational facilities – *Less than Significant*

The Proposed Project would be built on an approximate 7-acre parcel within an approximately 27-acre parcel purchased by CDFA in spring 2020. The closest parks to the Project site are Centennial Park and Summerfaire Park, located approximately 0.60 mile northeast and east, respectively. CDFA and CAHFS employees would need to travel approximately 1 road mile to access Centennial Park and 1.3 miles to access Summerfaire Park from the Proposed Project site. Lack of immediate access to the parks may reduce the number of employees using the park during work breaks. Additionally, as noted in Section 3.14, "Population and Housing," the Proposed Project would not result in substantial population growth, and, therefore, would not substantially increase

demand for parks and recreational facilities in the area. The fifteen additional CAHFS and CDFA employees and relocation of 44 existing employees that would be supported by the Proposed Project could marginally increase the use of existing parks (e.g., if they or their family were to use nearby recreational facilities during their free time), but these effects would not be substantial and would not require or result in the construction of new or expanded parks or recreational facilities. As a result, this impact would be **less than significant**.

b. Creation of new or altered recreational facilities – *No Impact*

The Proposed Project would not create or alter any recreational facilities. Likewise, the Project would not introduce substantial numbers of people to the area or otherwise cause the need to construct new or altered recreational facilities. Therefore, **no impact** would occur.

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3.17 TRANSPORTATION

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐
d. Result in inadequate emergency access?	☐	☒	☐

3.17.1 Environmental Setting

The Proposed Project site is located within the City of Turlock east of Dianne Drive and north of the TID Lateral Canal. The Proposed Project site is located approximately 2.5 miles southwest of the existing CDFA Laboratory located at 1550 N Soderquist Road in Turlock, CA. In addition to relocating the existing laboratory, the Proposed Project includes consolidating two additional CDFA offices, the AHB Office in Modesto and the MDFS Branch Office in Stockton. The existing AHB is located at 3800 Cornucopia Way, Modesto, CA. The existing MDFS is located at 2403 West Washington Street, Stockton, CA.

The Proposed Project's performance criteria prepared by the Criteria Architect team and the conceptual site plan (Figure 2-3) includes two primary driveways that would be accessed directly from Dianne Drive; one would be used for CDFA staff, visitors, and delivery supply trucks and one would be used for emergency vehicle access. In addition to these two driveways, the Proposed Project includes an access driveway that provides access to one ingress only driveway and one egress only driveway proposed along the northern property line. Because the Proposed Project would utilize approximately 7-acres of the approximately 27-acre parcel, it is anticipated that this access driveway would be converted to a public roadway in the future to provide access to the remaining 20-acres. However, because it is unknown when or how the remaining 27 acres would be developed, this would be constructed as an access driveway, rather than a public road, with the Proposed Project.

Dianne Drive would ultimately be constructed as an Industrial Street which is defined in the City of Turlock General Plan as noted below:

- **Industrial Streets** are roadways designed to accommodate trucks serving industrial areas, and generally provide two travel lanes. They are primarily found in the Turlock Regional Industrial Park (TRIP) and some older industrial areas south of Downtown. Their wide lanes are intended to accommodate multiple large trucks' turning movements. Access onto adjacent industrial properties is permitted including multiple access points per parcel.

State Regulations

SB 743 was signed into law in 2013 and is leading to substantial changes in the way transportation impact analyses are being prepared. Notably, it precludes the use of level of service (LOS) to identify significant transportation impacts in CEQA documents for land use projects, recommending instead that VMT be used as the preferred metric. On December 28, 2018, the CEQA Guidelines were amended to add Section 15064.3, Determining the Significance of Transportation Impacts, which states that generally, VMT is the most appropriate measure of transportation impacts. According to 15064.3(a), "Except as provided in subdivision (b)(2) (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." Beginning on July 1, 2020, the provisions of 15064.3 applied statewide.

To aid in SB 743 implementation, in December 2018 OPR released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) (Governor's Office of Planning and Research [OPR] 2018). The Technical Advisory provides advice and recommendations to CEQA lead agencies on how to implement the SB 743 changes. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures, and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion and with the provision of substantial evidence to support alternative approaches.

The Technical Advisory identifies "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. The Technical Advisory suggests that projects meeting one or more of the following criteria should be expected to have a less-than-significant impact on VMT.

- Small projects – projects consistent with a Sustainable Communities Strategy and local general plan that generate or attract fewer than 110 trips per day.

- Projects near major transit stops – certain projects (residential, retail, office, or a mix of these uses) proposed within 1/2 mile of an existing major transit stop or an existing stop along a high-quality transit corridor.

- Affordable residential development – a project consisting of a high percentage of affordable housing may be a basis to find a less-than-significant impact on VMT.

- Local-serving retail – local-serving retail development tends to shorten trips and reduce VMT. The Technical Advisory encourages lead agencies to decide when a project will likely be local-serving, but generally acknowledges that retail development including stores larger than 50,000 square feet might be considered regional-serving. The Technical Advisory suggests lead agencies analyze whether regional-serving retail would increase or decrease VMT (i.e., not presume a less-than-significant).

- Projects in low VMT areas – residential and office projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) as existing development in areas with low VMT will tend to exhibit similarly low VMT.

The Technical Advisory also identifies recommended numeric VMT thresholds for office projects (in addition to residential, retail, and mixed-use projects), as described below.

- Office projects that would generate vehicle travel exceeding 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

3.17.2 Discussion

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities – *Less than Significant*

The Proposed Project does not conflict with any transit goals or policies documented in the City of Turlock General Plan (City of Turlock 2012) and would not adversely affect future transit service planned nor would it create a demand for alternative transportation systems or affect public transit services. Two transit stops are located less than one mile from the Proposed Project site, one northeast of the Proposed Project site on Fulkerth Road and one southeast of the Proposed Project site on West Main Street. Additionally, if the West Canal Drive connection is constructed, additional transit stops will be accessible approximately one half of a mile from the Proposed Project site on North Tully Road. The City of Turlock Active Transportation Plan (ATP) (City of Turlock 2015) identifies proposed Class II bike lanes on Dianne Drive and both the ATP and the General Plan recommend sidewalks along industrial streets. The Proposed Project would construct sidewalks along the project frontage consistent with the City of Turlock requirements. Additionally, the Proposed Project would include the required dedication for future expansion of Dianne Drive to an industrial street, including right-of-way for future construction of Class II bike lanes. The Proposed Project

would be consistent with the City of Turlock General Plan and the City of Turlock Active Transportation Plan. This impact would be **less than significant**.

b. Conflict or be inconsistent with CEQA Guidelines section 15604.3, subdivision (b) – *Potentially Significant*

The Proposed Project includes consolidating two existing CDFA office buildings and one existing CAHFS laboratory into one site. Therefore, existing travel information was used to evaluate whether the Proposed Project would result in significant impacts to VMT. The existing AHB located in Modesto includes 14 employees; 12 of which are considered field employees. AHB field employees do not travel to the office daily and on a typical day, six employees (one administrative staff member, three veterinarians, and two livestock inspectors) travel to the office. The existing MDFS located in Stockton includes 13 employees; 11 of which are considered field employees. MDFS field employees do not travel to the office every day, rather they travel to the office once every few weeks.

The existing CAHFS laboratory located in Turlock includes 17 employees, all of which report to the office daily. In addition to employee trips, the existing laboratory currently has an average of four daily walk ins, four daily United Postal Service (UPS)/Federal Express (FedEx)/Golden State Courier deliveries, and one daily United States Postal Service (USPS) mail delivery. The Proposed Project would increase the total number of employees from 44 (including the AHB and MDFS offices and the Turlock laboratory) to a total of 59 employees. Due to this expansion, CDFA anticipates an average of nine daily walk in trips. UPS/FedEx/Golden State Courier deliveries and USPS mail deliveries are anticipated to remain the same. Additional weekly trips include trips to/from the rendering plant, linen pick-up/drop-off, hazardous waste pick-up, and additional miscellaneous trips. It is anticipated that 40 of the 59 employees would regularly travel to the office daily; however, this number may vary from day to day.

This information was used to develop the Proposed Project's average daily trip generation, which is displayed in **Table 3.17-1**.

Table 3.17-1. Project Trip Generation

Trip Type	Total Daily Trips
Employee	80
Walk Ins	18
UPS/FedEx/Golden State	8
US Mail	2
Total Project Trips	**108**

Notes:

Trip generation based on existing information provided by the CDFA and CAHFS.

Source: As calculated by Fehr & Peers (2020).

As displayed, the Proposed Project is anticipated to generate on average 108 daily trips. The Proposed Project was reviewed using the guidance set forth in OPR's Technical Advisory. As previously noted, the Technical Advisory indicates that lead agencies may screen out VMT impacts using various criteria, including projects that generate or attract fewer than 110 daily trips.

Although the Proposed Project is anticipated to generate less than 110 daily trips on average, additional analysis was determined to be necessary to confirm the project trip generation. In addition to reviewing the project trip generation, employee trip length information will be used to evaluate whether the Proposed Project would result in an increase in average VMT per employee. The Proposed Project's average VMT per employee will be compared to the average VMT per employee for the existing three facilities to determine if the Proposed Project would result in an increase in average VMT per employee. A preliminary analysis indicates the Proposed Project may result in a decrease in average VMT per employee when compared to the existing offices and laboratory; however, a more detailed analysis is necessary to confirm this. Therefore, the Proposed Project may result in **potentially significant** VMT impacts and will be evaluated further in the EIR.

c. Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment) – *Less than Significant*

The Proposed Project would not require any changes to existing road configurations that could create sharp curves or dangerous intersections and no site access or circulation issues have been identified that would cause a traffic safety problem/hazard. The Proposed Project would include new gated vehicular access driveways to the Proposed Project site that, if not properly designed and constructed, could potentially result in

safety hazards. However, the Proposed Project's final site plan would be designed such that all driveways and parking areas are accessible to emergency vehicles. Driveways proposed on Dianne Drive will be designed to meet the City of Turlock design standards, including sight distance requirements for fences, walls, and landscaping. Gates at the driveways proposed on Dianne Drive would be setback and left open during normal business hours to ensure no queuing spillback occurs onto Dianne Drive. This impact would be **less than significant**.

d. Result in inadequate emergency access – *Less than Significant*

The Proposed Project would include a fire truck accessible drive aisle/lane on Dianne Drive approximately 100 feet north of the southern property line. The fire truck lane would provide access throughout the site and connect to the egress only driveway along the northern property line. The multiple entry/exits proposed provide flexibility for emergency vehicles to access and maneuver throughout the site. The Proposed Project includes construction of a driveway access road along the northern frontage, which can be used for emergency access to the remaining approximately 20-acres of undeveloped land on the eastern side of the parcel. Additionally, the Proposed Project would be located approximately 1.5 miles (less than a five-minute drive) from the City of Turlock Fire Station 32. Therefore, this impact would be **less than significant**.

3.18 TRIBAL CULTURAL RESOURCES

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Proposed Project:			
a. 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)	☒	☐	☐
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐

3.18.1 Environmental Setting

The project area is located within the ancestral lands of the Northern Valley Yokuts, as discussed in Section 3.5, “Cultural Resources.”

A request was made to the Native American Heritage Commission (NAHC) on June 9, 2020, to review its files for the presence of sacred sites at or near the project location. At the same time, requests were made for a list of tribes with a traditional and cultural affiliation with the project area for the purpose of consultation as required by Pub. Res. Code Section 21080.3.1. The NAHC responded the same day, noting that no sacred sites are known to exist in the vicinity of the Proposed Project, and with a list of three tribal contacts for the purposes of Pub. Res. Code Section 21080.3.1 consultation. Each of the individuals identified by the NAHC was provided notification about the project via U.S. Mail with a returned certified receipt on June 24, 2020, and follow-up emails were sent on July 24, 2020 (see **Table 3.18-1**). There have been no

responses from any of those contacted, to date. All correspondence related to Pub. Res. Code Section 21080.3.1 is presented in **Appendix C**, *Native American Correspondence*.

Table 3.18-1. Native American Consultation

Contact	Tribe	Letter Date	Email Follow-up Date	Comments
Katherine Erolinda Perez, Chairperson	North Valley Yokuts Tribe	June 24, 2020	July 24, 2020	No response to date
Timothy Perez, Most Likely Descendant Contact	North Valley Yokuts Tribe	June 24, 2020	July 24, 2020	No response to date
William Leonard, Chairperson	Southern Sierra Miwuk Nation	June 24, 2020	July 24, 2020	No response to date

3.18.2 Discussion

a. Cause a substantial adverse change in the significance of a tribal cultural resource – *Potentially Significant*

None of the tribes contacted, to date, have responded to the project notification letters with information pertaining to the presence of tribal cultural resources within or near the project area. Therefore, it appears that there are no concerns about known tribal cultural resources. However, buried archaeological remains, including burials, may be discovered during project construction and these remains may be determined to be tribal cultural resources. If tribal cultural resources are identified in the project area and they cannot be avoided by the project, then the State will work with the tribe or tribes with a traditional and cultural affiliation with the project area to develop appropriate mitigation measures pursuant to Pub. Res. Code 21084.3. Mitigation measures may not lessen impacts to a less than significant level, therefore this may be a **potentially significant** issue. These impacts will be further evaluated in the EIR.

3.19 UTILITIES AND SERVICE SYSTEMS

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
Would the Project:			
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☒	☐	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☒	☐	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐
d. 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?	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☒	☐

3.19.1 Environmental Setting

Water

The City relies on groundwater to meet its municipal and industrial water demands and does not currently have a surface water supply[5]. Groundwater is supplied through the Turlock Sub-basin, which is a subunit of the San Joaquin Valley Groundwater basin.

In 2015, the City provided 5,675 million gallons of water supplies for municipal purposes to 18,686 water connections through a system of 20 active wells and one standby well (West Yost Associates 2016). Groundwater from these wells is pumped into the City's distribution system, which consists of approximately 250 miles of pipe. Projected water supply for 2025 is expected to be approximately 8,462 million gallons (West Yost Associates 2016).

Water supply to the Proposed Project will be conveyed through a new water pipeline connection extending from the Project to the existing City water main located in Dianne Drive. The proposed water line extension would be approximately 100 feet in length.

Turlock Irrigation District

TID operates the Don Pedro Reservoir, from which water is diverted for agricultural use and the irrigation districts' municipal and industrial customers. The Don Pedro reservoir impounds the Tuolumne River and has a storage capacity of 2,030,000 acre-feet of water (TID 2020). The reservoir is located approximately 29 miles northeast of the Proposed Project. TID delivers irrigation water from the Don Pedro Reservoir through its 250-mile long canal system and irrigates approximately 150,000 acres of farmland throughout 307 square-miles of service area (TID 2018).

TID and the Modesto Irrigation District together hold Water Right License 011058, which allows for diversion of storage of up to 1,046,800 acre-feet/year (AFY) from the Tuolumne River at the Don Pedro Dam (SWRCB 2020).

Wastewater

The City's existing sewer system consists of approximately 220 miles of sewer pipes as well as pump stations that convey wastewater to the Turlock Regional Water Quality Control Facility (RWQCF). The RWQCF provides wastewater treatment for the City of Turlock and is located

[5] The City is a member of the Stanislaus Regional Water Authority (SRWA) and has entered into a water sales agreement for delivery of 5,475 million gallons per year (15 million gallons per day [MGD]) of TID surface water. The SRWA Regional Surface Water Supply Project will be operational in 2023 (SRWA 2020).

approximately 1 mile south of the Proposed Project. The RWQCF has a capacity of 20 million gallons per day (MGD) and currently treats approximately 8.5 MGD (City of Turlock 2020).

An approximate 100-foot long sewer line would be installed to connect the Proposed Project site to the existing City of Turlock sewer main located in Dianne Drive. The proposed truck rinse would have pit drains that would be connected to the sewer system with oil and soil separators.

Stormwater

The City of Turlock manages and maintains the City's stormwater infrastructure which consists of approximately 133 miles of gravity storm lines, 40 stormwater pump stations and associated force mains, and 45 detention/retention basins (City of Turlock 2013). Collected runoff generally flows into detention/retention basins located throughout the City, and sometimes is pumped to the local drainage channels for disposal after a storm event. For areas of the City that are not located near detention/retention basins, stormwater is pumped directly into the TID canals. The City maintains a discharge permit with the TID that limits the amount of stormwater that can be discharged into the canals (City of Turlock 2013).

A stormwater retention system will be located on the Project site and will retain water for an 85th percentile storm. A 60-inch storm drain located adjacent to the Proposed Project site flows south on Dianne Drive and discharges to the detention basin located south of TID Lateral Canal. The Proposed Project will either connect into this existing storm drain or stormwater runoff would be conveyed into a landscape strip within the right-of-way on Dianne Drive.

Solid Waste

The City of Turlock contracts Turlock Scavenger for solid waste collection and disposal service, along with recycling and organic waste collection. Garbage is taken to the transfer station and then hauled to the Fink Road Landfill or to the Stanislaus Resource Recovery Facility (SRRF), adjacent to the landfill (City of Turlock 2012). The Fink Road landfill is located approximately 16 miles southwest of the Proposed Project and is the only active solid waste landfill in Stanislaus County. The landfill is expected to reach capacity and close in 2052 (Stanislaus County 2019).

During preparation for construction, the Proposed Project site will be cleared and grubbed, including the removal of on-site vegetation. Demolished materials and debris will be hauled offsite to an appropriate location such as the landfill or SRRF as mentioned above. The Proposed Project will contain an approximate 20 feet wide by 15 feet deep and 300 gross square feet (GSF) waste enclosure that will include several trash dumpsters and recycling bins.

Three fully permitted, Class I landfills exist in California for disposal of hazardous waste: Chemical Waste Management's facility in Kettleman City, Clean Harbors' facility in Buttonwillow, and Clean Harbors facility in Westmorland (DTSC 2020). The nearest Class I landfill to the Project site is Chemical Waste Management's Kettleman facility, which is

approximately 128 miles south of the Project site. For information regarding Hazardous Wastes at the Proposed Project, see Section 3.9, "Hazards and Hazardous Materials."

Electricity and Natural Gas

TID provides electric service to the City of Turlock. Existing electrical lines are located along Dianne Drive and directly north of TID Lateral Number Four, along the southern boundary of the Proposed Project site. An approximate 150 feet electrical line will be installed in underground conduit and would extend to the Proposed Project. Natural gas within the City is provided by PG&E. An approximate 100-feet long natural gas line will extend from the Proposed Project to PG&E's existing gas main located in Dianne Drive. A generator enclosure will be kept on the Project site and will contain an emergency generator, subbase fuel tank, exhaust system, cooling system, engine control systems, and miscellaneous cables and equipment.

Communications

Communications services within the City are provided by AT&T. Existing communication lines are located on poles along Dianne Drive. Communication lines would be installed within underground conduit and would extend approximately 100 feet to the Proposed Project facility.

3.19.2 Discussion

a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects – *Potentially Significant*

The Proposed Project would require water for many of the Project facilities that would be located onsite. Project facilities such as the laboratories, hot water boiler and storage tank, cooling tower, chiller and pump, truck rinse area, boiler rooms, sprinkler system, landscape and irrigation would all require water usage. Water would also be needed for employee and visitor handwashing, toilet flushing, and other miscellaneous activities. It is unknown what the Proposed Project's water demand would be on the City of Turlock's total water supply; therefore, this impact will be further analyzed in the EIR.

During Project construction, water would be supplied by a water truck and sanitary portable restrooms would be used. The amount of wastewater that the Project would generate during operation is expected to be limited but will be further analyzed in the EIR to determine if the volumes of wastewater generated during operation would be within the capacity of the RWQCF.

Because it is unknown at this time what the Proposed Project's water demand would be on the City's total water supply, as well as what the Project's wastewater impact would

be on the capacity of the RWQCF, these impacts would be **potentially significant** and will be further analyzed in the EIR. The EIR will also provide an analysis on the impacts to stormwater drainage, electric power, natural gas, and telecommunications facilities.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years – *Potentially Significant*

Construction activities for the Proposed Project would rely on water trucks to meet water supply needs (e.g., for dust control, equipment cleaning, and fill conditioning). During operation, the Project site would obtain water from the City of Turlock. As described above, groundwater is currently used to meet the City of Turlock's water needs. The water sales agreement between the City and SRWA would allow delivery of TID surface water beginning in 2023 which will help to mitigate future groundwater quality degradation (West Yost Associates 2016). The City's present water system would be expected to serve the Project; however, the Project has not confirmed with the City of Turlock that sufficient water supplies would be available to serve the project and reasonably future development during normal, dry, and multiple dry years. Therefore, this criterion will be further evaluated in the EIR. Impacts to water supplies as result of the Proposed Project construction and operation would be considered **potentially significant** due to the unknown impacts that the Proposed Project could have on water supplies.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments – *Potentially Significant*

As described under Criterion "a" above, the Proposed Project would not generate municipal wastewater during construction because sanitary portable restrooms would be used. During operation, employees and visitors on the Project site would generate wastewater from utilizing the truck rinse, toilet flushing, hand washing, and other related activities. The limited volume of wastewater that may be generated by the Proposed Project would not be expected to materially affect the remaining capacity at the RWQCF; however, the City has not sought out or received a Will Serve letter from the RWQCF. Once the Will Serve letter has been received, a determination would be made that states if the RWQCF has sufficient capacity to serve the Proposed Project. Until that determination is made, the impact would be **potentially significant** and will be further evaluated in the EIR.

d, e. 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 / Comply with all applicable management and reduction regulations related to solid waste – *Less than Significant*

During construction, the Proposed Project would generate some construction debris associated with site preparation. This would include clearing and grubbing, grading, excavation, importing and placing fill, and removal of all on-site vegetation. During operation, the Proposed Project would generate typical domestic solid waste (e.g., employees' trash) as well as hazardous wastes (e.g., laboratory chemicals, biogenic materials, solvents, cleaners, other evaporative compounds). Hazardous waste disposal would be transported weekly to a hazardous waste facility for disposal or recycling. Biohazardous materials, such as animal carcasses, would be incinerated onsite or at a rendering facility. See Section 3.9, "Hazards and Hazardous Materials," for further discussion on hazardous wastes.

The Proposed Project would be LEED silver-certified and would have recycling bins on site. In accordance with the Integrated Waste Management Act, the Proposed Project would seek to divert at least 50 percent of its solid waste. The Project site would be served by the City of Turlock and non-recyclable solid waste generated by the Proposed Project would be taken first to a transfer station and then to the Fink Road Landfill. As described in Section 3.19.1, the Fink Road Landfill has sufficient remaining capacity and is not projected to close until 2052. The relatively minimal amounts of solid waste that would be generated by the Proposed Project would not meaningfully affect this landfill's capacity.

As such, the Proposed Project would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or impair the attainment of any solid waste goals. Additionally, it would comply with applicable management and reduction regulations related to solid waste. Therefore, this impact would be **less than significant**.

3.20 WILDFIRE

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:			
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐
b. 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?	☐	☒	☐
c. Require the 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?	☐	☒	☐
d. 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 changes?	☐	☒	☐

3.20.1 Environmental Setting

The CAL FIRE maps Fire Hazard Severity Zones (FHSZ) based on the severity of fire hazards that would be expected to occur in that area. These areas, or "zones," are divided into three zones that are based on increasing fire hazard: medium, high, and very high. These zones are determined by factors such as fuels, slope, and fire weather for the area (CAL FIRE 2020). FHSZs are found in State Responsibility Areas (SRAs); these are areas where the State of California has financial responsibility for wildfire protection and prevention (CAL FIRE 2020). Incorporated cities are not included in SRAs. Local Responsibility Areas (LRAs) are also identified by CAL FIRE but managed at the local level, and include incorporated cities, urban regions, agriculture lands, and portions of the desert. These areas are classified as Very High Fire Severity Zones, and protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract (CAL FIRE 2020).

The Project site is located on land that is relatively flat and was previously used for agricultural row crops. Surrounding areas around the Project site consist of more agriculture, rural residences, and urbanization. The characteristics of the agricultural and urban environments do not make the Project site and surrounding areas high risk fire areas.

The Project site is located in a LRA and is considered a low risk fire area (CAL FIRE 2007a). Fire protection services are provided by the City of Turlock's Fire Department. Section 3.15, "Public Services," further describes fire protection services for the Project site.

3.20.2 Discussion

a-d. Substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks; require the installation or maintenance of associated infrastructure that may exacerbate fire risk; or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes – *Less than Significant*

As described above, the Proposed Project would be located in an area previously used for agricultural row crops and surrounded by agricultural lands as well as urban developments and rural residences. There are no wildland areas or areas that are at high risk for wildfires within the vicinity of the Project site. The Proposed Project is not located in, nor is it near, SRAs identified by CAL FIRE as very high fire hazard severity zones (CAL FIRE 2007b). Since the Proposed Project is not within or near an SRA, or lands classified as very high fire hazard severity zones, the Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan. In addition, the Proposed Project would include an access driveway and a fire access isle that would allow access by emergency vehicles to the Project site as well as the remaining parcel. The remainder of the 27-acre parcel would be mowed and disced by CDFA to minimize the potential for high weed growth and a potential fire risk on the undeveloped parcel. Installation of the proposed utilities would occur underground; therefore, installation of or maintenance of infrastructure would not exacerbate fire risks. No people or structures would be exposed to any downslope or downstream flooding or landslides subsequent to any potential fires since the Project site is flat. These impacts would be **less than significant.**

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Significance Criteria	*Potentially Significant Impact*	*Less-than-Significant Impact*	*No Impact*
a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐
b. Does the Project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐
c. Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐

3.21.1 Discussion

a. Degrade the Quality of Environment, Reduce Habitat or Populations, or Eliminate Important Examples of California History or Prehistory – *Potentially Significant*

Degrade Quality of Environment

As described in Sections 3.1 through 3.20 of this environmental checklist the Proposed Project has the potential for significant impacts on various environmental resources that could degrade the quality of the existing environment. These potential impacts related to the quality of the environment will be evaluated in the EIR.

Wildlife Habitat and Populations; Rare and Endangered Species

The Project site is located on a 7-acre parcel formerly used for agricultural purposes. As described in Section 3.4, "Biological Resources," the Project site and immediate vicinity support habitat for several special-status wildlife species. Construction activities that disturb burrows, generate noise, or create visual distractions during the breeding season could disturb nesting birds and raptors within the Project site and vicinity. The potential exists for significant impacts on special-status wildlife and on nesting birds. Therefore, this impact would have the potential to significantly impact biological resources and habitats and will be further evaluated in the EIR.

California History and Prehistory

As described in Section 3.5, "Cultural Resources," the Proposed Project construction activities would include ground disturbing activities, including potential excavations to greater than 20 feet deep. The Proposed Project has the potential for significant impacts related to unknown archaeological resources, human remains, and tribal cultural resources. Therefore, this impact would have the potential to significantly impact cultural resources and will be further evaluated in the EIR.

b. Result in Cumulatively Considerable Impacts – *Potentially Significant*

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines section (§) 15355). Cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines § 15355[b]).

Detailed analysis of a project's contribution to cumulative impacts is required when (1) a cumulative impact to which a project may contribute is expected to be significant, and (2) the project's contribution to the cumulative impact is expected to be cumulatively considerable, or significant in the context of the overall (cumulative) level of effect. As described in Sections 3.1 through 3.20 of this environmental checklist, the Proposed Project has the potential for significant impacts on agricultural resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, minerals, noise, transportation, tribal cultural resources, and utilities and service systems; these potential impacts will be evaluated in the EIR. Therefore, it is possible that the Proposed Project would make a substantial contribution to one or more cumulative impacts, and that contribution may be cumulatively considerable. Therefore, cumulative impacts of the Proposed Project would be **potentially significant** and will be further evaluated in the EIR.

c. Result in Adverse Effects on Humans - *Potentially Significant*

Sections 3.1 through 3.20 of this environmental checklist indicate that the Proposed Project has the potential for significant impacts on various environmental resources that could result in a substantial adverse effect on human beings. Therefore, this impact would be **potentially significant** and will be further evaluated in the EIR.

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Chapter 4
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SECTION 3.21, MANDATORY FINDINGS OF SIGNIFICANCE

None.

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