CALIFORNIA CONSERVATION CORPS

Placer Center
Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement

Initial Study/Mitigated Negative Declaration

Horizon WATER and ENVIRONMENT

April 2016

CALIFORNIA CONSERVATION CORPS
1719 24th Street
Sacramento, CA 95816

Notice of Intent to Adopt a Mitigated Negative Declaration

1. Project Title & Number: Placer Center Kitchen/Dining Hall/ Multipurpose Room and Dormitory Replacement Project

2. Property Owner(s): State of California

3. Contact person: Stephanie Coleman; Senior Environmental Planner; environmental@dgs.ca.gov

4. Project location: 3710 Christian Valley Road, Auburn, Placer County, California. See attached project location maps.

   Project APNs: 075-140-002-000, 075-140-008-000, 075-140-009-000 and 075-140-011-000

5. Project Sponsor: The California Conservation Corps (CCC), with assistance from the Department of General Services (DGS), is the lead agency for preparation of a mitigated negative declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for construction and operation of the Placer Center Kitchen/Dining Hall/ Multipurpose Room and Dormitory Replacement Project.

6. General Plan designation: Rural Estate

7. Zoning: Farm Uses

8. Brief Description of the Project: The Placer Center Kitchen/Dining Hall/ Multipurpose Room and Dormitory Replacement (Proposed Project) would be constructed as part of the CCC's effort to meet current program requirements at its Placer Center and to replace aging and inadequate facilities. The Proposed Project would involve the demolition of the existing kitchen/dining hall and men's/women's dormitory buildings and construction of two new replacement structures; demolition of an existing handball court; replacement of the existing Placer Center parking area; construction of an outdoor basketball court and a patio area; installation of an array of photovoltaic panels and other site amenities; and related site work.

9. The project site is not located on the lists enumerated under Section 65962.5 of the Government Code, including, but not limited to lists of hazardous waste facilities.

PRELIMINARY DETERMINATION:

The CCC has determined that the project analyzed in the attached initial study checklist would not have a significant effect on the environment and the CCC intends to adopt a mitigated negative declaration. Copies of the proposed mitigated negative declaration and all documents referenced are available for review online at www.ccc.ca.gov/about/newsroom/Pages/newsroom.aspx.

4/6/16
DATE OF THIS NOTICE

Dawne Bortolazzo
BY: Dawne Bortolazzo, Administrative Chief

WRITTEN COMMENT PERIOD: April 13, 2016 to May 12, 2016.

Please send written comments to the attention of Stephanie Coleman, Department of General Services, 707 Third Street, Suite 4-430, West Sacramento, CA 95605, or via e-mail to environmental@dgs.ca.gov.

CALIFORNIA CONSERVATION CORPS

Placer Center Kitchen/Dining Hall/ Multipurpose Room and Dormitory Replacement

Initial Study/Mitigated Negative Declaration

Prepared for:

State of California
Department of General Services
707 Third Street
West Sacramento, CA 95605

On behalf of the Lead Agency:

California Conservation Corps
1719 24th Street
Sacramento, CA 95816

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April 2016

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Acronyms and Abbreviations

AB	Assembly Bill
ADA	Americans with Disabilities Act
APE	area of potential effects
APN	Assessor's Parcel Number
AST	aboveground storage tanks
ATCM	Airborne Toxic Control Measure
bgs	below ground surface
BMP	best management practices
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Standards Code
CCC	California Conservation Corps
CCR	California Code of Regulations
CDC	California Department of Conservation
CDF	California Department of Forestry
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey's
CH_4	methane
CHP	California Highway Patrol
CIWMB	California Integrated Waste Management Board
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
COMET	Corpsmember Orientation, Motivation, Education and Training
CORPS	California Conservation Corps
corpsmembers	California Conservation Corps service member
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agencies
CVPCSD	Christian Valley Park Community Service District
cy	cubic yards
dB	decibel
dBA	A-weighted decibel
dbh	dimeter at breast height

DGS	California Department of General Services
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EO	Executive Order
ESA	Federal Endangered Species Act
F&G	California Fish and Game Code
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GPS	Global Positioning System
H_2S	hydrogen sulfide
HAPs	hazardous air pollutants
HCP	Habitat Conservation Plan
hp	horsepower
Hz	Hertz
I-80	Interstate 80
in/sec	inch per second
IS/MND	Initial Study/Mitigated Negative Declaration
kW	kilowatts
kWh	kilowatt hours
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
LEED	Leadership in Energy & Environmental Design
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant levels
MLD	Most Likely Descendent
mph	miles per hour
MS4	municipal separate storm sewer systems
msl	mean sea level
$MTCO_2e$	metric tons of carbon dioxide equivalents
MWPRSP	Mid-Western Placer Regional Sewer Project
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NID	Nevada Irrigation District
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOx	nitrous oxides
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act of 1977

NRHP	National Register of Historic Places
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PCAPCD	Placer County Air Pollution Control Distr
PCPWD	Placer County Public Works Department
PCTPA	Placer County Transportation Planning Agency
PG&E	Pacific Gas & Electric Company
Phase I ESA	Phase I Environmental Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
ppd	pounds per day
ppm	parts per million
PPV	peak particle velocity
Proposed Project	Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement Project
PST	Pacific Standard Time
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act of 1976
REC	recognized environmental conditions
RMP	risk management plan
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SAGOG	Sacramento Area Council of Governments
SMAQMD	Sacramento Metropolitan Air Quality Management District's
SMARA	Surface Mining and Reclamation Act of 1975
SMD 1	Sewer Maintenance District No. 1
SO_2	sulfur dioxide
sq. ft.	square foot
SR	State Route
STP	Shovel Test Pit
SWPPP	Stormwater Pollution Prevention Plan
TACs	toxic air contaminants
TCR	tribal cultural resource
URS	
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
UST	underground storage tanks
VdB	vibration velocity in decibels
VOC	volatile organic compound
WPWMA	Western Placer Waste Management Agency
XPhI	Extended Phase I
°F	degrees Fahrenheit
§	Section
$\mu g/m^3$	microgram per cubic meter

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Chapter 1
Introduction

The California Conservation Corps (CCC) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed CCC Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement Project (Proposed Project). The project and its location are described in depth in Chapter 2. 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/MND has been prepared in accordance with CEQA, under which the Proposed Project is considered a project for the purposes of CEQA (CEQA Guidelines Section 15378). CCC, as the lead agency under CEQA, will consider the Proposed Project's potential environmental impacts when considering whether to approve the project. This IS/MND 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/MND are preliminary. CCC anticipates that the final design for the Proposed Project would include some modifications to these preliminary plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification.

This IS/MND describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project on or with regard to the following topics:

Aesthetics
Agricultural/Forestry Resources
Air Quality
Biological Resources
Cultural Resources
Geology, Soils, and Seismicity
Greenhouse Gas Emissions
Hazards and Hazardous Materials
Hydrology and Water Quality
Land Use and Planning
Mineral Resources
Noise
Population and Housing
Public Services
Recreation
Transportation and Traffic
Utilities and Service Systems

1.2 Organization of this Document

This IS/MND contains the following components:

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

Chapter 2, *Project Description*, describes the Proposed Project, including its purpose and goals, the project 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 environmental 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, as well as any mitigation measures that would be required to reduce potentially significant impacts to a less-than-significant level.

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

Appendices:

Appendix A. *Air Quality and GHG Appendix*

Appendix B. *Special-Status Species List*

Appendix C. *Built Resources Technical Report*

Appendix D. *Noise Analysis*

Appendix E. *Mitigation Monitoring and Reporting Program*

1.3 Impact Terminology

This IS/MND 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 *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the implementation of the mitigation measures described.

- An impact is considered *significant or potentially significant* if the analysis concludes that a substantial adverse effect on the environment could result.

- 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/MND 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 and Need for Project

2.1.1 Background

The California Conservation Corps (CCC or Corps) is the oldest and largest state conservation corps program in the United States, with seven residential and 17 nonresidential sites throughout the state. Modeled after the original federal Civilian Conservation Corps created in 1933 by President Franklin Roosevelt, legislation establishing the CCC was signed into law in 1976 by Governor Jerry Brown. The CCC brings together young men and women between the ages of 18 and 25 (up to 29 for veterans) (corpsmembers) for one to three years of working outdoors to improve California's natural resources. More than 120,000 young people have participated in the program since its inception.

The Placer Center, one of the CCC's residential sites, is located in the Sierra Nevada foothills between State Route (SR) 49 and Interstate 80 (I-80), approximately 7 miles north of Auburn, California. It opened in 1978 as one of eight fire centers jointly operated with the California Department of Forestry and Fire Protection (CAL FIRE). In 1984, the Placer Center became the combined Energy Center for the CCC, incorporating its E-Con (Energy Conservation), weatherization, and solar programs. The center's construction work program was added in 1996. Currently, an average of 80 corpsmembers are based at the Placer Center.

The CCC works for a wide range of project sponsors throughout California, including state agencies, federal agencies, city and county agencies, school districts, nonprofit organizations, and private industry. Projects at the Placer Center fall under two categories: construction work and resources work. Construction work includes office remodels, carport and steel building construction, cement work, and the building of decks and bridges. Resources work includes landscaping, constructing and maintaining trails, building and rehabilitating parks, clearing streams, reducing wildland fire hazards by removing brush, and planting native trees and plants.

Placer Center crews respond to emergencies, such as fighting fires and responding to floods, earthquakes, and pest infestations, within California as support personnel for various state agencies. During fire season, crews provide base camp support and are part of the Incident Command System. During flood season, crews are sent to place sandbags in locations such as Sacramento–San Joaquin Delta levees, clean up after mudslides, and implement erosion control measures. Crews also respond to a variety of agricultural emergencies and earthquake recovery efforts.

Placer Center corpsmembers receive a two-week orientation to the CCC at the beginning of their year of service. This orientation, called "COMET" (Corpsmember Orientation, Motiva-

tion, Education and Training), allows corpsmembers to learn the rules and policies of the CCC and the Placer Center. Corpsmembers are also trained in emergency response and organization, fire camp support, flood training, and the Hazardous Waste Operations and Emergency Response standard of hazardous waste cleanup. Training in the use of tools for specific job work is conducted as needed along with jobsite safety. Corpsmembers learn to use chain saws, brush chippers, and a variety of other power tools. They also learn to identify jobsite hazards and how to prevent injuries.

The Placer Center's residential corpsmembers participate in a number of events and opportunities at the center. The Corpsmember Advisory Board governs life at the center by maintaining a recreation building and store, weight room, and library, and by planning many recreation events. The center's dining facility gives corpsmembers an opportunity to gain culinary skills. Living quarters are dormitory-style, with four to eight corpsmembers occupying each room. Weekends offer opportunities for members to volunteer at local events. The Placer Center also has a wood shop, auto shop, construction training lab, three classrooms, and a warehouse.

2.1.2 Need for Project

The existing dining hall, kitchen, and dormitory facilities at the Placer Center were originally constructed in the 1950s and have been in constant service for over 50 years. Modifications and upgrades to these facilities have been intermittent. The existing buildings have reached the end of their useful life. A significant investment of capital would be required to bring them up to date, but even if brought up to date, the buildings would not be able to accommodate current CCC program requirements. These requirements include:

- housing for up to 88 full-time corpsmembers;
- housing for 30–60 COMET trainees;
- kitchen and dining facilities adequate to serve three meals per day for up to 160 people;
- provision of overflow accommodations for other state trainees;
- upgraded parking area;
- semi-truck access to kitchen/dining facilities; and
- upgraded recreational amenities (new indoor basketball/volleyball court, new outdoor basketball court).

2.2 Project Objectives

The CCC Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement Project (the "Proposed Project") is being constructed as part of CCC's effort to meet current program requirements at its Placer Center and to replace aging and inadequate facilities. Specific project objectives are as follows:

- Construct new facilities that will better serve the Placer Center's program requirements.

- Develop facilities accredited under the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) program at the "silver" or better level of certification, as required by state law; and
- Construct facilities that meet the standards of the Americans with Disabilities Act (ADA), California Green Code, and Title 24 energy and resource standards.

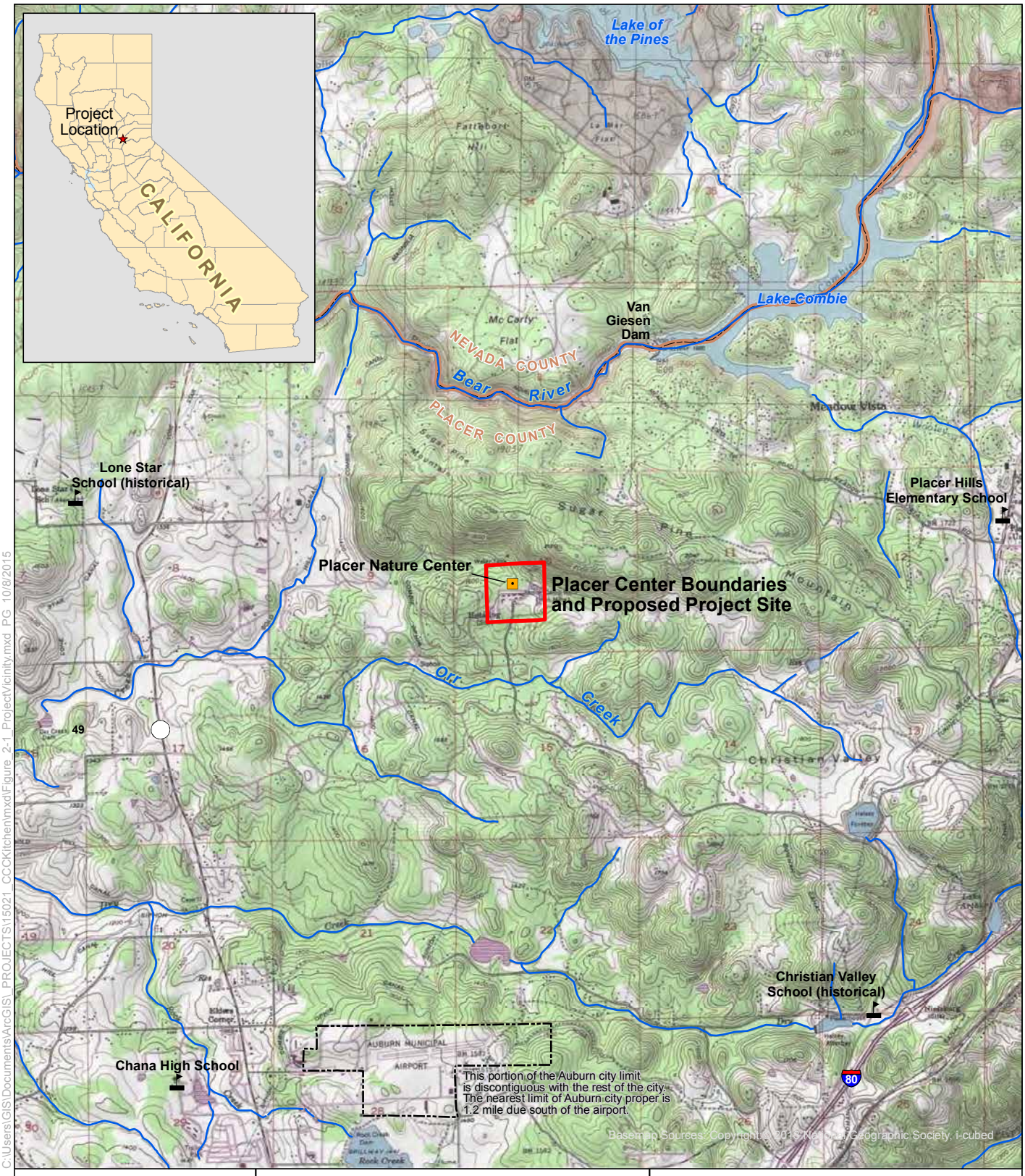
2.3 Project Location and Setting

The Placer Center is located at 3710 Christian Valley Road in Auburn, Placer County, California, in the Sierra Nevada foothills. The Placer Center site—is located approximately 7 miles north of downtown Auburn, approximately 36 miles northeast of Sacramento, approximately 53 miles southwest of Truckee, and approximately 59 miles southwest of Lake Tahoe (Figure 2-1 and Figure 2-2). The Placer Center is located approximately 2 miles east of SR 49 and approximately 3 miles northwest of I-80.

The approximately 63-acre Placer Center site consists of four parcels: APN No. 075-140-002-000 (35.2 acres), APN No. 075-140-008-000 (15.4 acres), APN No. 075-140-009-000 (7.2 acres), and APN No. 075-140-011-000 (5.2 acres). The approximately 4-acre project site would be located within the Placer Center's 63-acre combined parcel. The property is within the Auburn/Bowman Community Planning area in Placer County, outside of the City of Auburn's planning boundaries or sphere of influence. The Placer Center site is a designated rural estate land use (required minimum parcel size of 4.6-10 acres) and is zoned for farm uses (required minimum parcel size of 4.6 acres). The farm zoning provides areas for commercial agricultural operations that can also accommodate services to support these uses, including residential land uses at low population densities (Placer County 2014).

The Placer Center parcel site includes rural vegetated areas, the CCC's structures and facilities, and the Placer Nature Center. Within the project site, existing CCC structures include two office buildings, a dining hall and kitchen, men's and women's dormitories, three warehouses, a handball court, a gravel parking area, and a former leach field. The leach field, including ponds, was filled and restored to a relatively flat grass-covered ground surface in 2010. Vegetation within the project site consists mainly of grasses, pine and oak trees, and ornamental trees. The project site is located approximately 1,590 feet above mean sea level (amsl) and drainage is generally southward.

The Placer Center shares property with the Placer Nature Center, which is a non-profit educational resource center with facilities and trails to support environmental education programs for children, schools, and the public. The Placer Nature Center's facilities are located approximately 200 feet north of the Placer Center's buildings. Rural estate (residential) land uses surround the project site.



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Prepared for:
California Conservation Corps

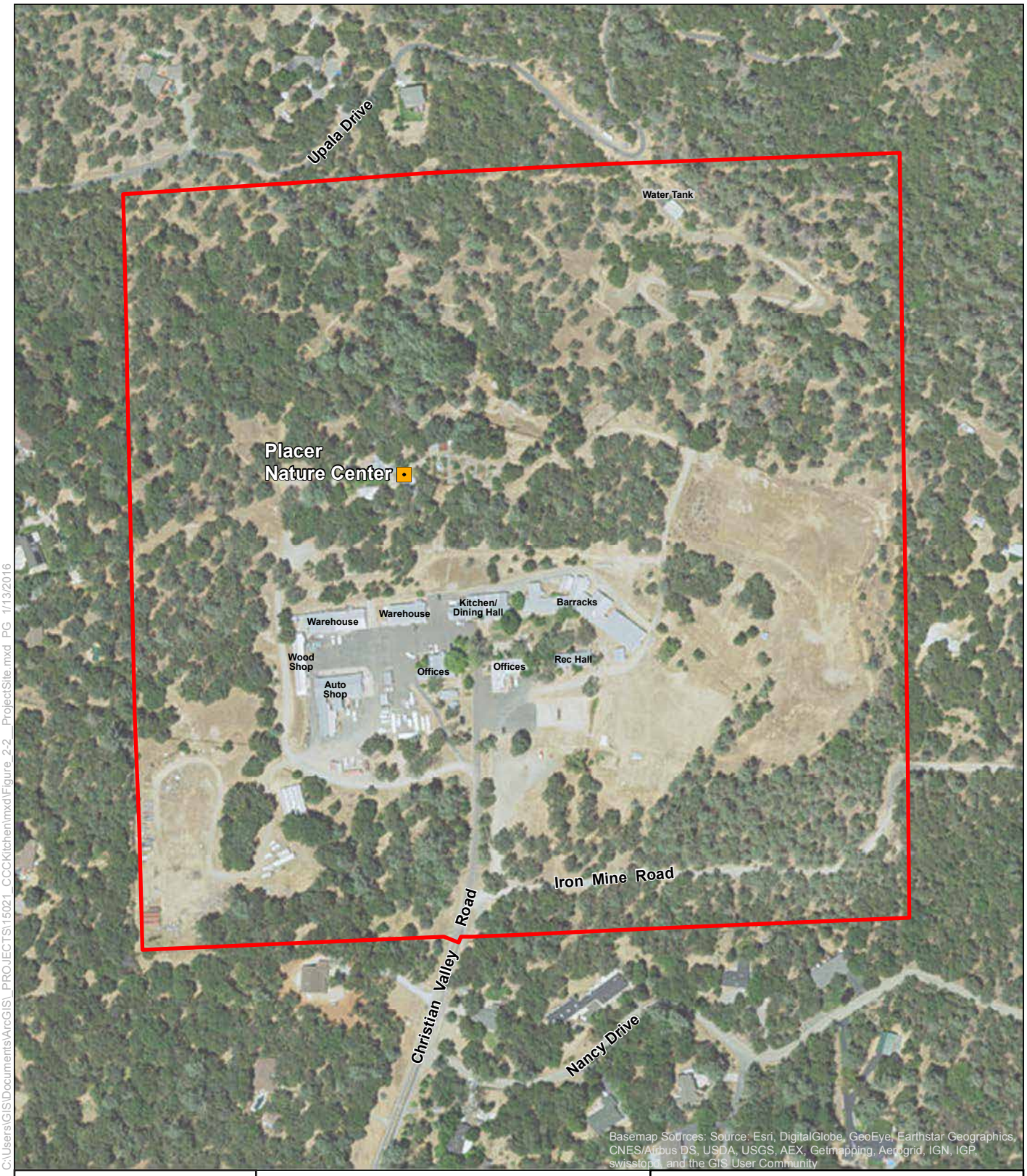
Project Site
Auburn City Limits
Placer Nature Center
Creek / River
School

0 0.5 1
Miles

N

Figure 2-1
Project Vicinity

Kitchen/Dining Hall/
Multipurpose Room
and Dormitory Replacement
Initial Study/Mitigated Negative Declaration



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Prepared for:
California Conservation Corps

Placer Center Boundary

Placer Nature Center

0 200 400
Feet

N

Figure 2-2
Project Site

Kitchen/Dining Hall/
Multipurpose Room
and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

2.4 Proposed Project Characteristics

The Proposed Project involves the demolition of the existing kitchen/dining hall and men's/women's dormitory buildings and construction of two new replacement structures; demolition of an existing handball court; replacement of the existing Placer Center parking area; construction of an outdoor basketball court and a patio area; installation of an array of photovoltaic panels and other site amenities; and related site work.

The existing kitchen/dining hall and men's/women's dormitory buildings would be demolished and a new approximately 19,000 square foot (sq. ft.) combined men's/women's dormitory would be constructed on roughly the same footprint as the two existing buildings. A new approximtely 12,000 sq. ft. kitchen/dining hall/multipurpose facility would be constructed at the site of the existing handball court. In addition, a new approximately 44,500 sq. ft. asphalt parking area would replace the existing gravel parking area, a 95-foot by 50-foot basketball court would be built adjacent to the men's wing of the new dormitory, a new water tank would be constructed, and an array of photovoltaic panels (approximately 3,600 sq. ft.) would be installed in the former location of the aforementioned ponds. **Figure 2-3** shows the conceptual locations of these structures on the project site. The Proposed Project would occur on land that has previously been, or is currently, developed. It would temporarily disturb approximately 4 acres, including staging areas, and would permanently develop approximately 3.5 acres (approximately 65,340 sq. ft.) within the 63-acre site parcel.

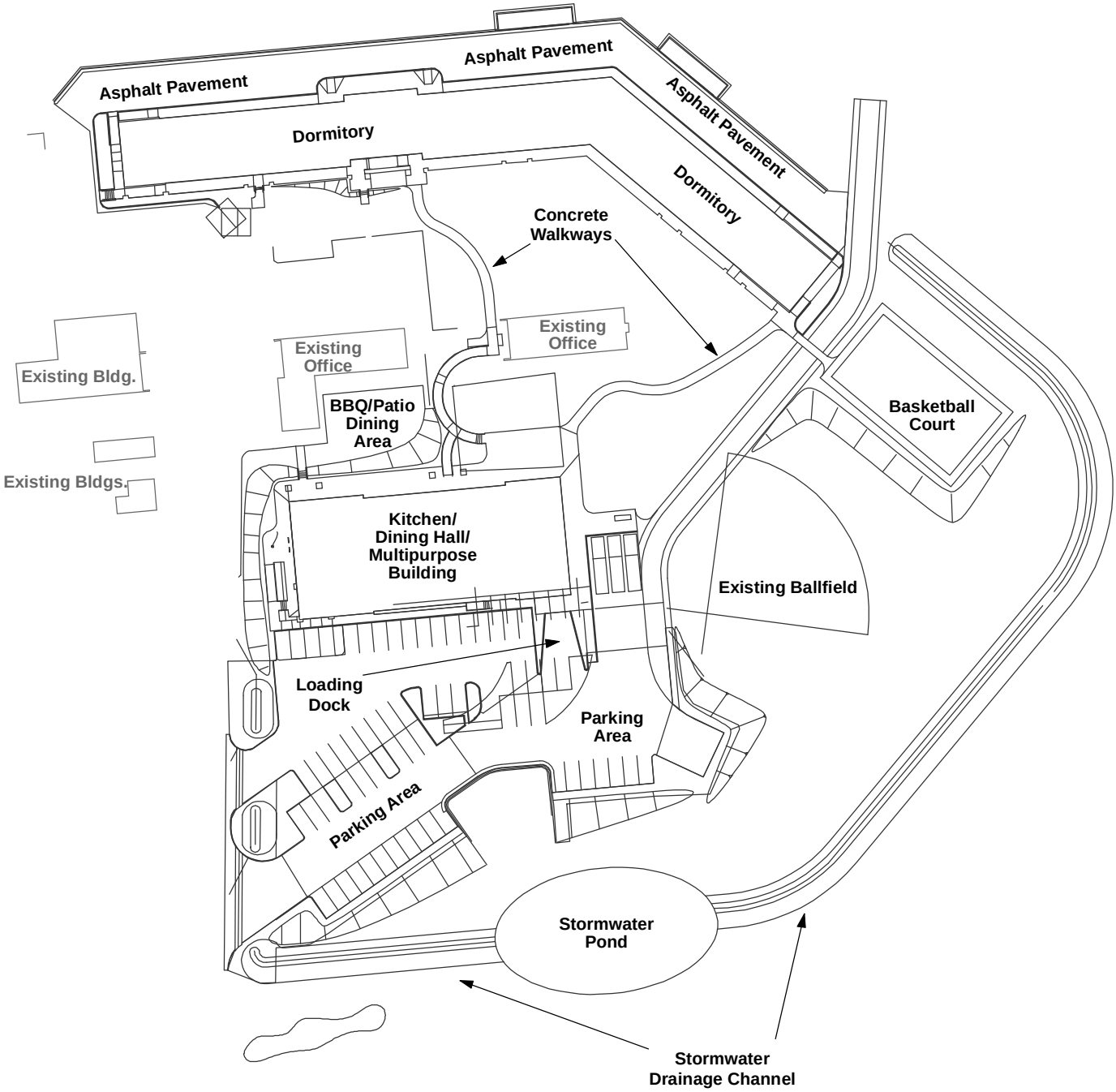
This section continues with a discussion of the project facilities, construction activities, and operational activities that would be part of the Proposed Project. Operational activities are discussed, and changes from the existing Placer Center operations are identified, as appropriate.

2.4.1 Project Facilities

Descriptions of the proposed structures and other site elements are provided below. Preliminary locations of project facilities are indicated in **Figure 2-3**.

Structures

Structures that would be part of the Proposed Project comprise a kitchen/dining hall/multipurpose building and a dormitory building. As the conceptual building designs are finalized, building elements may be added to help achieve a net zero energy loss.



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California Conservation Corps

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Figure 2-3
Conceptual Proposed Site Layout

Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

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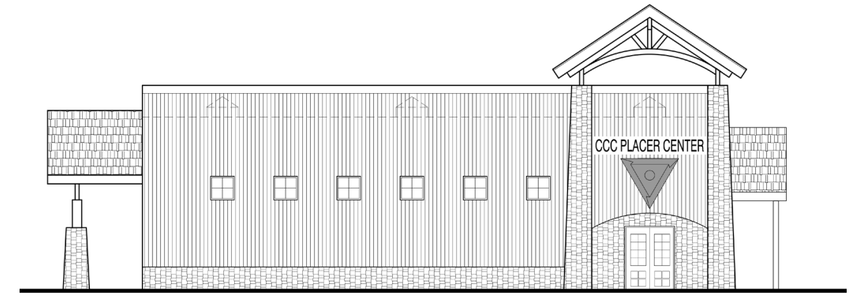
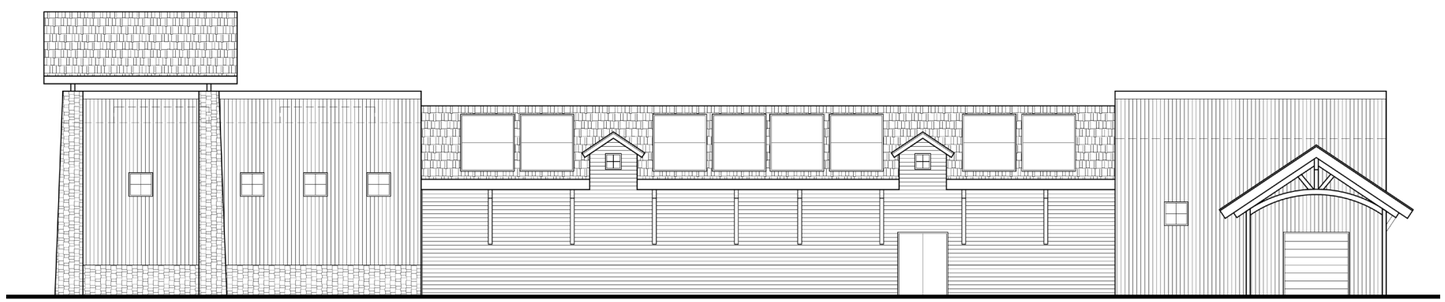
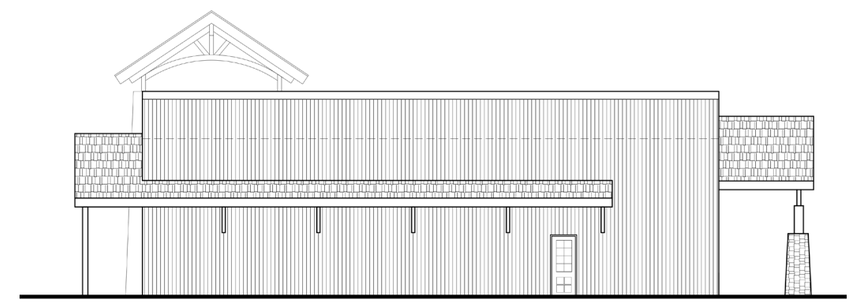
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION

Prepared by:

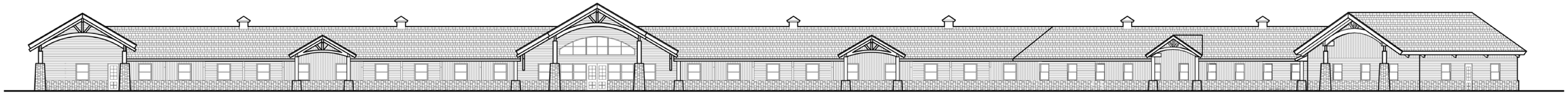
Horizon WATER and ENVIRONMENT

Prepared for:
California Conservation Corps

Source: Department of General Services

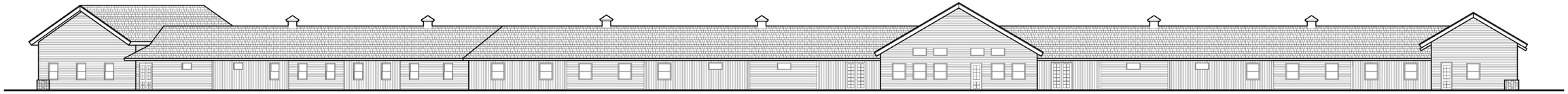
Figure 2-4
Conceptual Building Design: Kitchen/Dining Hall/Multipurpose Room

Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

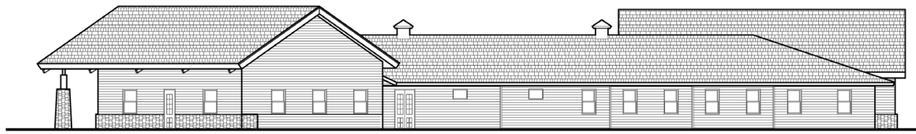


SOUTH ELEVATION

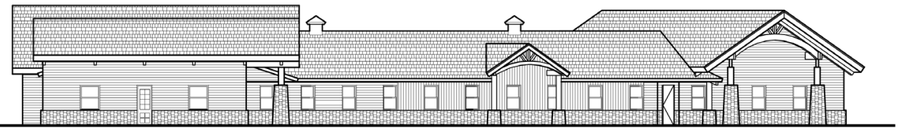
ENLARGED SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION

Prepared by:

Horizon WATER and ENVIRONMENT

Prepared for:
California Conservation Corps

Source: Department of General Services

Figure 2-5
Conceptual Building Design: Dormitory

Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

Kitchen/Dining Hall/Multipurpose Room Building: The CCC kitchen/dining hall/ multipurpose room building would be a single-story building of approximately 12,000 sq. ft. The facility would be built to meet California Green Code and Title 24 energy and resource standards, and achieve a U.S. Green Building Council LEED silver or higher accreditation. The U.S. Green Building Council grants LEED certification based on a scoring system related to eight major categories: location and transportation; sustainable sites; water efficiency; energy and atmosphere; materials and resources; indoor environmental quality; innovation; and regional priority (U.S. Green Building Council 2016). The facility would include the following components:

- kitchen (~3,000 sq. ft.);
- dining hall (~3,500 sq. ft.);
- multipurpose room set up for indoor basketball or volleyball (~3,300 sq. ft.); and
- support space (~2,200 sq. ft.), to include:
  - showers and restroom facilities;
  - storage facilities; and
  - janitorial, mechanical, and electrical rooms.

Solar hot water heating panels would be provided on the roof of the kitchen/dining hall/multipurpose facility.

Dormitory Building: The CCC dormitory would be a single-story building of approximately 19,000 sq. ft. that would accommodate 88 corpsmembers and 30–60 COMET trainees. The current ratio of men to women at the Placer Center is and, would likely continue to be, approximately 7:3, and the dormitory would reflect this ratio. As with the kitchen/dining hall/multipurpose facility, the dormitory building would be built to meet California Green Code and Title 24 energy and resource standards, and achieve a U.S. Green Building Council LEED silver or higher accreditation. The facility would include:

- men's dormitory and COMET barracks wing (~8,600 sq. ft., to accommodate 60 corpsmembers and 20–40 COMET trainees);
- women's dormitory and COMET barracks wing (~4,500 sq. ft., to accommodate 28 corpsmembers and 10–20 COMET trainees);
- common area (~5,900 sq. ft.), to include:
  - living room/game room;
  - security office;
  - library; and
  - gym;
- showers, restrooms, and laundry facilities;
- storage facilities;
- janitorial, mechanical, and electrical rooms; and
- covered walkway (~3,000 sq. ft.).

The facility would have a roof comprised of both a flat roof with polyvinyl chloride (PVC) single ply roofing, and a pitched section with asphalt shingle roofing. Solar hot water heating panels would be provided on the southern face of the roof of the dormitory building. These panels would be arranged in three groups, located close to the restroom/shower facilities in each wing.

Miscellaneous Site Elements

Miscellaneous site elements of the Proposed Project that would support the maintenance and functioning of the kitchen/dining hall/multipurpose facility, dormitory building, or other CCC operations are described below.

Patio and Barbecue Area: A patio with an outdoor barbecue area and pizza oven would be constructed on the project site, adjacent to the kitchen/dining hall/multipurpose facility. The patio area would include a planter with ornamental vegetation. The barbecue area would be approximately 40 by 40 feet square (1,600 sq. ft.).

Basketball Court: A new outdoor basketball court would be constructed on the project site adjacent to the men's wing of the dormitory building, as shown in Figure 2-3. The size of the basketball court would be approximately 95 feet by 50 feet, with a 5-foot apron (6,300 sq. ft.).

Loading Dock: A covered loading dock adjacent to the kitchen/dining hall/multipurpose facility would be constructed on the project site. The loading dock would be designed to accommodate both large semi-trailers and 24-foot box trucks. From the loading dock, a ramp would lead down to a cart wash and trash/recycling enclosure. The loading dock/ramp area would be approximately 10 feet by 20 feet (200 sq. ft.).

Parking Area

A new paved parking area approximately 44,500 sq. ft. in size would be provided to the south of the proposed kitchen/dining hall/multipurpose facility, as shown in Figure 2-3. This parking area would be located on the site of the current gravel corpsmembers' parking area and would provide access to the kitchen loading dock. The parking area would provide spaces for corpsmembers, visitors, and handicapped-accessible parking, and include three electric vehicle charting stations. The parking area would accommodate access and turnaround space for both semi-trailers and box trucks making deliveries to the loading dock. The parking area would be constructed using asphalt concrete to support potential truck weights.

Ancillary Improvements

Exterior Lighting: Exterior lighting would be installed at locations in the parking area and along the path between the dormitory and dining hall for security and safety purposes. Lighting would be directed downward to minimize off-site glare.

Footpaths/Walks: A reconfigured footpath would connect the new dormitory building with the new kitchen/dining hall/multipurpose facility, as shown in Figure 2-3.

Retaining Walls: Approximately 1,000 feet of new or replacement retaining walls would be constructed to provide soil and slope stability. Retaining walls would be located in two different locations.

Landscape and Irrigation: New landscaping would be installed to match the general type and extent of the existing landscaping, utilizing drought-tolerant and native species

wherever possible. Approximate irrigated area would be 12,500 sq. ft. Planters would be installed in two different locations.

Utilities and Stormwater Drainage

Utilities: The project site has immediate access to utilities, including water, sewer, electricity, natural gas, and communications infrastructure. Christian Valley Water District provides potable water to the site and has jurisdiction over local water infrastructure and maintenance. The Nevada Irrigation District (NID) supplies non-potable water via ditches to an existing onsite water tank for onsite irrigation and, as necessary fire fighting, purposes.

The Proposed Project would construct a new steel 300,000-gallon structure with a diameter of approximately 40 feet and a height of approximately 32 feet. This tank would be used as a replacement to the existing 34,000-gallon, square, concrete water tank (see Figure 2-3) that holds water from NID. The location of the new tank has not yet been determined. It may be placed at the location of the existing tank, or near the Placer Center buildings or solar panels. The existing tank may be demolished or decommissioned. A 20-foot-square building to house an assumed 84 horsepower diesel pump would be constructed adjacent to the new tank. The Proposed Project would also include 400 linear feet of both new 6-inch fire water pipeline and 4-inch domestic water pipelines, and may include installation of new fire hydrants.

Another option for fire fighting purposes would be to connect a pump to the potable water system such that potable water could be used as an additional or alternate potential fire flow source. If this option was implemented, a backup generator would also be required. For the purposes of the project analysis, it was assumed that a total of one pump (84 hp) and one emergency generator (450 hp) would be installed under either water supply option. It was assumed the overall project's proposed emergency generator could also be used for the water supply purposes and a separate generator just for the water supply would not be needed.

The sewer lines are under the jurisdiction of Placer County Sewer Maintenance District No. 1 (SMD 1). Two 6-inch PVC sanitary sewer lines underlie the existing site and will be relocated. Approximately 220 linear feet of sewer piping would be replaced and an additional 600 linear feet constructed. A new underground 5,000-gallon grease interceptor would be installed outside of the dining hall building line in order to allow truck access for emptying the interceptor.

The Pacific Gas & Electric Company (PG&E) provides electricity to the project site and surrounding community. An existing onsite propane tank would continue to be used to supply the Proposed Project. An underground 2-inch natural gas line near the women's dormitory would be relocated (approximately 600 linear feet) and electricity lines would be connected to the project site. In addition, electrical infrastructure (approximately 400 linear feet) would be installed to connect the photovoltaic panels, described below, to the Proposed Project's buildings.

Photovoltaic (Solar) Panel Array: A new approximately 10,000 sq. ft. ground-mounted photovoltaic panel array would be installed at the eastern edge of the project site, as shown in Figure 2-3. This photovoltaic panel array would be capable of generating approximately

50 kilowatts of electricity and would have a tilt feature. Concrete grade beams would be used to support the photovoltaic panels. The approximate maximum height of the panels, including support beams, would be eight feet.

Stormwater Drainage: New stormwater pipelines would be connected to the existing infrastructure at the south of the site. Near the proposed kitchen building, an existing culvert and small drainage channel may be modified to relocate or extend the culvert, and potentially fill in at least part of the drainage channel. These improvements would then drain to a proposed onsite stormwater detention pond that would capture runoff generated onsite.

2.4.2 Construction

Construction Methods

Construction activities for the Proposed Project would include the construction phases and approximate durations shown in Table 2-1. Additional descriptions of these phases and construction equipment are provided below and in Appendix A, Air Quality and Greenhouse Gas Emission Calculations. Table 2-1 also provides the anticipated number of potential worker and construction-related trips for the Proposed Project's various construction phases. The number of construction workers would vary by phase and may be up to approximately 26 employees during the building construction phase.

Table 2-1. Construction Activity Summary

Construction Phase	Approximate Duration (days)	Approximate Number of Workers	Worker Trips	Vendor Trips	Total Hauling Trips (Daily)
Demolition	20	7.5	15	0	180 (9)
Site Preparation	5	9	18	0	350 (70)
Grading	8	9	18	0	0
Building Construction	230	26.5	53	17	0
Paving	18	10	20	0	0
Architectural Coating	18	5.5	11	0	0

Note: Trips are based upon the CALEEMOD defaults as shown in the Air Quality Appendix. Worker trips are roundtrip. Vendor and hauling trips are one-way. Total hauling trips are the number of one-way trips over the entire construction phase. Daily hauling trips are provided in parentheses.

Demolition, Site Preparation, and Grading (Earthwork): Demolition activities would involve removing approximately 38,500 sq. ft. of paving and structures. Hazardous materials abatement of the existing buildings to be demolished (18,000 sq. ft.) would be performed, which would involve disposing of any identified hazardous materials at an appropriate hazardous waste disposal facility. All demolished material and debris would be disposed of off-site at an appropriate location selected by the construction contractor. For

the purposes of this analysis, the disposal site is presumed to be located within 1.0 hour of travel time from the project site. Lead and asbestos may be present in the demolished building materials and would be disposed of at an appropriate location. Approximately 75 percent of demolition materials would be recycled.

Site preparation would include clearing and grubbing, importing and placing fill, and lime treatment of soils. Clearing and grubbing would be conducted using bulldozers, standard excavators, and hand labor on approximately a 155,000 sq. ft.-area. The grading phase would include grading, excavation, fine grading to hardscapes, and compacting the fill and other materials.

Site preparation and grading activities may require fragmenting the site's underlying bedrock by controlled blasting or use of an impact hammer (hoe ramming). Controlled blasting involves inserting explosives into holes drilled into the bedrock to dislodge rock from the parent material and detonating these explosives. The controlled blasting process considers geologic factors and the number, depth, and spacing of explosive charges to maximize the fracturing effect of the blast while minimizing the strength of the charge and resultant vibration. Following detonation, dislodged rock would be removed, and, if necessary, new holes are drilled and the explosive charge placement and detonation process would be repeated. The other bedrock fracturing process would involve mechanically fracturing the rock with a large impact hammer attached to a back hoe or other piece of construction equipment. Similar to the blasting process, the resulting bedrock fragments would be removed and, as necessary, the process would be repeated.

It is anticipated that excavated soils would be reused onsite. Fill would be delivered to the project site by conventional haul trucks (approximately 10 cubic yards [cy] per load). Fill material would be placed with an excavator and compacted with a compactor/roller. It is anticipated that approximately 2,800 cy of fill would be imported. Soil import trips were considered in the estimated hauling trips during grading and site preparation activities shown in Table 2-1. Soil excavation activities would be conducted to a depth of approximately 5 feet.

Lime treatment of the existing soils, if necessary, would involve spraying of lime chemicals on an area of approximately 52,600 sq. ft. The purpose of the lime treatment is to minimize the potential for corrosion of the Proposed Project's facilities. Fine grading would be performed on this same area.

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

- delivery of building materials, including wood, and/or concrete delivery, forming, and rebar placement;
- structural work (assembly and construction);
- electrical/instrumentation work; and
- mechanical equipment and piping installation.

Pipelines and Underground Utility Equipment: Drainage, water supply, wastewater, and natural gas pipelines and underground utilities would be installed in open trenches, typically using conventional cut-and-cover construction techniques. The first step in the

construction process would be surface preparation, including removing 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 would generally vary between 3 and 5 feet, and the depth would be up to 5 feet.

In most locations, trenches would likely have vertical sidewalls to minimize the amount of soil excavated and the area needed for the 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 onsite locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, some fill import and export is anticipated as described above. Soil quantities provided above would be hauled off-site for disposal at an appropriate disposal site. During construction, vertical-wall trenches would be temporarily closed at the end of each workday, either by covering them with steel plates or backfill material, or by installing fences to restrict access.

Once pipelines are installed, the trenches would be backfilled. Dump trucks would deliver stockpiled or imported backfill material to the trenching operation. Backfill material would typically be placed in layers around and over the pipes. A vibratory compactor would then compact and consolidate the fill material. This process would be repeated in approximately 6-inch layers until the trench is filled to its original level. The final layer below the surface might consist of crushed aggregate base material of sufficient depth to allow areas to be repaved.

Paving and Architectural Coating: These construction phases would involve the final site restoration activities, including paving of parking areas, installing landscaping, or installing erosion controls, as necessary, and applying an architectural coating (paint or other coatings) to building structures.

Construction Equipment

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

- track-mounted excavator
- small crane
- end dump truck
- ten-wheel dump truck
- paving equipment
- flat-bed delivery truck
- concrete truck
- grader
- bulldozer
- impact hammer (hoe ram)
- backhoe
- scraper
- compactor
- front-end loader
- water truck
- forklift
- compressor/jack hammer
- mowing equipment (e.g., weedeater, commercial lawnmower)
- boom truck
- blasting equipment

As described above, it is possible that minor blasting to fragment portions of the underlying bedrock may be necessary.

Construction Fencing and Tree Protection

The construction area would be fenced for safety and security. Trees within the project footprint may be removed.

Construction Schedule

Construction of the Proposed Project is anticipated to last for up to approximately 24 months, beginning in approximately September 2017 and ending in approximately September 2019. Construction activities would be performed Monday through Friday between 7 a.m. and 5 p.m.

2.4.3 CCC Placer Center Operations During Construction

During construction activities, all existing Placer Center corpsmembers (approximately 80) would be reassigned to the CCC's Greenwood Center, located in Greenwood, California, approximately 11 miles southeast of the Placer Center site. Corpsmembers would perform their typical duties from this center and, due to the variable nature of CCC tasks and locations, would not be anticipated to have increased trips or vehicle miles traveled. CCC Placer Center staff would continue to operate at the Placer Center site during the approximately two years of construction.

The Placer Center and the Placer Nature Center share an entrance to the land parcel at Christian Valley Road. However, approximately 230 feet north of the parcel entrance, a separate access road to the Placer Nature Center branches off and is generally unused by CCC personnel. It is anticipated that access to the road leading to the Placer Nature Center would be maintained at all times during the Proposed Project's construction activities.

2.4.4 Proposed Project Operations

Employees, Corpsmembers, and Vehicle Equipment Use

The Proposed Project would maintain the number of Placer Center employees and corpsmembers at 12 and 88, respectively, with an additional number of COMET trainees located at the center during their initial orientation period. The average vehicle miles traveled by staff and corpsmembers to and from the Proposed Project site would remain approximately the same as for the existing facilities. Overall, average vehicle miles traveled to and from the center would increase incrementally based on the increased number of staff persons and corpsmembers stationed at the center.

Facility Operations

Operation of the Placer Center requires periodic deliveries of food and kitchen/dining supplies, office supplies, tools/equipment, and other materials similar in quantity and frequency to trips occurring as part of the existing operations. Similar to the existing Placer Center operations, the Proposed Project operations would include periodic building alarm tests as part of the fire protection system for the kitchen/dining hall/multipurpose facility and dormitory building, and would always be active. The alarm would be tested every six

months and would emit a loud alert typically lasting 30 seconds. The photovoltaic array would be used to supply a portion of the energy demands at the facility. The Proposed Project would have a new diesel emergency backup generator (approximate 450 horsepower). No change in trips related to propane deliveries during the Proposed Project's operation compared to existing conditions.

2.4.5 Permits and Approvals

Because the project site is owned by the State of California, local regulations do not apply to the Proposed Project. 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 which potentially apply to off-site activities, along with the responsible or permitting agency, are described for the Proposed Project in Table 2-2.

Table 2-2. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
Central Valley Regional Water Quality Control Board	Clean Water Act (CWA) Section 402	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants	NPDES General Construction Permit notification
State Water Resources Control Board	Clean Water Act (CWA) Section 402	NPDES discharge of municipal pollutants	Compliance with NPDES Phase II Municipal Stormwater Permit
Central Valley Regional Water Quality Control Board	Clean Water Act (CWA) Section 402	NPDES groundwater quality protection	General Low Threat Groundwater Dewatering Permit (if needed)
Central Valley Regional Water Quality Control Board	Clean Water Act (CWA) Section 401	Water quality certification for placement of dredge and fill materials into waters of the United States.	401 Water Quality Certification is required for federal permits, such as CWA Section 404 permits (if needed)
U.S. Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 404	Regulates placement of dredge and fill materials into waters of the United States.	Individual or Nationwide Permits (if needed)

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
State Historic Preservation Officer	National Historic Preservation Act (NHPA) Section 106	USACE must consult with State Historic Preservation Officer if historic properties or prehistoric archaeological sites may be affected by the project.	To be conducted in conjunction with USACE Section 404 compliance (if needed)
U.S. Fish and Wildlife Service (USFWS) National Marine Fisheries Service (NMFS)	Federal Endangered Species Act (ESA)	USACE must consult with USFWS and NMFS if threatened or endangered species may be affected by the project.	ESA Section 7 consultation (if needed)
Placer County Air Pollution Control District (PCAPCD)	District Rules and Requirements	Portable Equipment Registration Program (PERP) regulates portable engines of certain size	Permit to Operate Portable Equipment
Placer County Air Pollution Control District (PCAPCD)	Rule 228, Fugitive Dust	Minimize fugitive dust from construction activities	Air District approval of dust control plan

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Chapter 3
Environmental Checklist

This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the California Conservation Corps (CCC) Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement (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 3.18) provides a brief overview of 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 significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

3.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the Proposed Project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (California Department of Transportation [Caltrans] 2016). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

Local Laws, Regulations, and Policies

The Auburn Bowman Community Plan (Placer County 1999) identifies Christian Valley Road as a scenic corridor and contains goals and policies to protect scenic corridors and conserve visual resources. In regard to Christian Valley Road, the Plan states (Placer County 1999):

> *The scenic resources of this corridor include dense oak woodland bodies of water, as well as many other rural features. Views from this roadway are important to the character of Christian Valley. These routes provide a network of scenic roads within the Auburn/Bowman Plan for residents of the area as well as for those visiting or traveling*

> *through the community. The scenic resources along these routes are one of the real assets of this area and should be protected and enhanced through the many programs available to the County.*

The Placer County General Plan (2013) contains similar goals and policies related to protection of scenic routes and resources. Notable policies in the County General Plan include requiring landscaping along designated scenic corridors where desirable to maintain and improve scenic qualities and screen unsightly views.

Neither the Auburn/Bowman Community Plan nor the Placer County General Plan identify any scenic vistas in the Project vicinity.

3.1.2 Environmental Setting

As described in Chapter 2, *Project Description*, the Proposed Project is located along Christian Valley Road in unincorporated Placer County, approximately 7 miles north of downtown Auburn. The project site is located within the Auburn/Bowman Community Planning area and is designated for rural estate land use. The project site includes rural vegetated areas, the existing CCC structures and facilities, and the Placer Nature Center. The project site and surrounding area is wooded with a large number of trees and is relatively hilly in terrain. The nearest residences are approximately 0.1 mile away off of Christian Valley Road, Iron Mine Road, Nancy Drive, and Upland Road.

No officially designated state scenic highways are present in the project vicinity. The stretch of State Route (SR) 49 located approximately 2 miles west of the project site is eligible for designation as a state scenic highway, but is not officially designated as such (Caltrans 2015). As described in the Regulatory Setting section above, the Auburn Bowman Community Plan identifies Christian Valley Road, which is immediately adjacent to and provides access to the project site, as a scenic corridor (Placer County 1999).

3.1.3 Discussion of Checklist Responses

a. Adverse effects on scenic vistas—*Less than Significant*

A scenic vista is generally considered to be an expansive view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. As mentioned above, neither the Auburn/Bowman Community Plan nor Placer County General Plan identifies any scenic vistas within the Project vicinity. Likewise, none of the residences near the project site off of Christian Valley Road, Iron Mine Road, and Upland Road would be anticipated to have expansive views of the area because they are all located on relatively even terrain that is heavily wooded. The project site is at the base of several small hills to the north, which may have expansive views of the area including the project site. However, as described in Chapter 2, *Project Description*, the Proposed Project buildings and improvements would be similar to existing conditions. Construction activities could temporarily adversely affect views from the hills to the north of the site, but these effects would not last longer than the estimated two-year construction period and would not be anticipated to be substantial. Therefore, this impact would be **less than significant.**

b. Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway—*Less than Significant*

As described in the Environmental Setting above, there are no officially designated state scenic highways present in the project vicinity. SR 49 is eligible for designation as a state scenic highway and is located approximately 2 miles to the west of the project site. However, the project site is likely not visible to motorists traveling on SR 49 because the highway is at a similar elevation to the project site and there are several small outcroppings and numerous trees between the highway and the site.

Christian Valley Road is identified as a scenic corridor in the Auburn Bowman Community Plan, and motorists traveling along the segment of Christian Valley Road immediately adjacent to the project site would have views of the project site and proposed structures. As described in Chapter 2, *Project Description*, some trees within the project footprint may be removed during construction, but any removal of trees would not be anticipated to substantially affect the overall scenic resources along this stretch of Christian Valley Road. Eight of the buildings currently on the project site (two of which would be demolished as part of project construction) were constructed between 1948 and 1952, but, as described in Section 3.5, *Cultural Resources*, none of these structures appear to meet the criteria for historical resources. No substantial rock outcroppings would be removed as part of the project, and no other scenic resources would be anticipated to be damaged or removed. Therefore, this impact would be **less than significant.**

c. Degrade the existing visual character or quality of the site—*Less than Significant*

The existing visual character of the project site is rural-residential, typified by large lot sizes and a large number of trees within and between parcels. As shown in Figure 2-2, the project site itself currently has a campus-like appearance of buildings interspersed with trees, and several open grassy areas on the eastern side of the site. Project construction activities could result in temporary changes to the visual character of the area due to the presence of construction crews and heavy equipment. However, the duration of construction would be temporary (anticipated to last for approximately two years) and views of the site from surrounding residences and motorists along Christian Valley Road would be largely obstructed by trees. Overall, the new proposed structures and facilities would be similar in character to the existing CCC facilities, and would not result in any substantial adverse changes to existing visual character or quality. Therefore, this impact would be **less than significant.**

d. Create new sources of light or glare—*Less than Significant*

The existing CCC facilities present sources of light and glare at the project site, in the form of lighting and moderately reflective rooftop material. Surrounding residences may also present existing sources of light in the project vicinity. New sources of light and glare from the Proposed Project would not be anticipated to be substantial. The proposed solar panels, which would be installed on the open grassy area on the east side of the project site, would be constructed of a non-reflective material. The same would be true of the proposed steel

water tank. As described in Chapter 2, *Project Description*, exterior lighting would be installed at locations in the parking area and along the path between the dormitory and dining hall for security and safety purposes. Lighting would be directed downward to minimize off-site glare. Overall, light and glare associated with the Proposed Project would be anticipated to be similar to existing conditions. This impact would be **less than significant.**

3.2 Agricultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 (FMMP) of the California Resources Agency, to nonagricultural 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 in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?	☐	☐	☐	☒
e. Involve other changes in the existing environment that, because of their location or nature, could result in a conversion of Farmland to a nonagricultural use?	☐	☐	☐	☒

3.2.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to agricultural and forestry resources and the Proposed Project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2014). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2014):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the four years before the FMMP's mapping date.
>
> ***Farmland of Statewide Importance:*** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the four years before the FMMP's mapping date.
>
> ***Unique Farmland:*** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the four years before the FMMP's mapping date.
>
> ***Farmland of Local Importance:*** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2015a). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies generally for the conservation of lands and soils suitable for agricultural use and prevention of conversion of agricultural lands to non-agricultural use. The Placer County General Plan (2013) contains similar goals and policies for the conservation of agricultural resources and protection of existing agricultural land uses.

3.2.2 Environmental Setting

The project site lies within the unincorporated area of Placer County, specifically within the Auburn Bowman Community Plan area. The Auburn Bowman Community Plan area covers approximately 40 square miles of largely rural lands, with supporting agriculture and open space, to the north-northeast of the City of Auburn (Placer County 1999). The Placer County General Plan update (Placer County 2013) identifies the area surrounding the project site as Rural Residential. Zoning maps indicate that parcels in the vicinity have a minimum size of 4.6 acres, and are zoned as "residential-agriculture" and "farm" (Placer County 2015a).

As described in Chapter 2, *Project Description*, the Placer Center site is zoned for farm uses by the County. The "farm uses" zoning provides for commercial agricultural operations that can also accommodate services to support these uses, including residential land uses at low population densities. The Placer County Important Farmland map (CDC 2014) and Williamson Act map (CDC 2015a), categorizes the CCC parcel as "Urban and Built-Up Land," characterized as properties "occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel." Institutional facilities are identified as one of the many suitable uses for lands of this type.

3.2.3 Discussion of Checklist Responses

a. & e. Convert farmland to non-agriculture use; Conflicts with or loss of agricultural or forest lands—*No Impact*

The project site has been developed as a State facility since 1948; first as a California Department of Forestry and Fire Protection (CAL FIRE) center, and now as a CCC center. The Proposed Project would demolish existing structures and replace them in kind within the footprints of previously existing structures or features. As described above, no agricultural resources are present on the project site, nor do forest lands exist on site. The site is not mapped by the CDC through the FMMP and is not considered Important Farmland. Construction and operation of the Proposed Project would not affect agricultural or forest lands in the area. **No impact** would occur.

b. & c. Conflict with existing zoning for agriculture use, Williamson Act Contract, or forest land or timber land—*No Impact*

The project site is designated for rural residential, or residential-agriculture use in the County's general plan. Existing land uses in the vicinity of the project site are similarly categorized, and no agricultural or forestry resources are present. Although Placer County

participates in the Williamson Act program, there are no existing Williamson Act contracts in the area and no potential for conflicts from the Proposed Project. **No impact** would occur.

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

No forestry resources or forest lands currently exist on the project site. While several trees are present on the project site and may be removed as part of the Proposed Project, these trees are not part of a stand intended for commercial production. The project site and the surrounding area are not currently used for commercial timber production. **No impact** would occur.

3.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management 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. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c. 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Regulatory Setting

Federal and State Laws, Regulations, and Policies

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM_{10}), particulate matter of aerodynamic radius of 2.5 micrometers or less ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health. Ground level ozone is caused by emissions of ozone precursor, nitrous oxides (NOx) and reactive organic gases (ROG).

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 within the Sacramento Valley Air Basin, which is comprised of nine air districts and includes Shasta, Tehama, Glenn, Butte, Colusa, Yuba, Sutter, Yolo, Sacramento, and portions of Placer and Solano Counties. The Placer County Air Pollution Control District (PCAPCD) manages air quality within Placer County of the Sacramento Valley Air Basin for attainment and permitting purposes.

Table AQ-1 shows the current attainment status for the state and federal ambient air quality standards. The area is designated as nonattainment for federal and state ozone (O_3) standards and a state particulate matter standard (PM_{10}).

Table AQ-1. Attainment Status of the State and Federal Ambient Air Quality Standards

Contaminant	Averaging Time	Concentration	State Standards Attainment Status[1]	Federal Standards Attainment Status[2]
Ozone	1-hour	0.09 ppm	N	See footnote 3
	8-hour	0.070 ppm	N	
		0.070 ppm		N, see footnote 3
Carbon Monoxide	1-hour	20 ppm	A	
		35 ppm		U/A
	8-hour	9.0 ppm	A	U/A
Nitrogen Dioxide	1-hour	0.18 ppm	A	
		0.100 ppm[5]		U/A
	Annual arithmetic mean	0.030 ppm	A	
		0.053 ppm		U/A
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	A	
		0.075 ppm		U/A
	24-hour	0.04 ppm	A	
		0.14 ppm		U/A
	Annual arithmetic mean	0.030 ppm		U/A
Particulate Matter (PM_{10})	24-hour	50 µg/m^3	N	
		150 µg/m^3		U
	Annual arithmetic mean	20 µg/m^3	N	
Fine Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m^3		A
	Annual arithmetic mean	12 µg/m^3	A	A
Sulfates	24-hour	25 µg/m^3	A	

Contaminant	Averaging Time	Concentration	State Standards Attainment Status[1]	Federal Standards Attainment Status[2]
Lead[6]	30-day average	1.5 µg/m^3	A	
	Calendar quarter	1.5 µg/m^3		U/A
	Rolling 3-month average	0.15 µg/m^3		U/A
Hydrogen Sulfide	1-hour	0.03 ppm	U	
Vinyl Chloride[6] (chloroethene)	24-hour	0.010 ppm	U	
Visibility Reducing Particles	8 hour (10:00 to 18:00 PST)	See footnote 4	U	

A – attainment ppm – parts per million
N – non-attainment PST – Pacific Standard Time
U – unclassified µg/m^3 – micrograms per cubic meter

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety. National standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the three-year average of the 4th highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM_{10} standard is attained when the three-year average of the 99th percentile of monitored concentrations is less than 150 µg/m^3. The 24-hour PM2.5 standard is attained when the three-year average of 98th percentiles is less than 35 µg/m^3. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the three-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the three-year average of annual averages spatially averaged across officially designed clusters of sites falls below the standard.
3. The national 1-hour ozone standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. However, the attainment status has not yet been updated based on this revised 8-hour standard. It is likely that the region will remain in non-attainment.
4. Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
5. To attain this standard, the three-year average of the 98th percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
6. CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Sources: CARB 2015a, USEPA 2016a

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. 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. CARB is responsible for setting emission standards for vehicles sold in California and 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), including the following relevant measures, are implemented to address sources of TACs:

- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Nonvehicular Diesel Fuel
- Asbestos ATCM for Construction, Grading, Quarrying and Surface Mining Operations
- Asbestos ATCM for Surfacing Applications

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies to protect and improve air quality in the plan area and to assure Placer County's compliance with state and federal air quality standards. The Placer County General Plan (2013) contains similar goals and policies related to air quality.

PCAPCD Regulations

PCAPCD has established several air quality regulations applicable to the Proposed Project. During construction, some equipment may require air permits such as crushing operations, and portable equipment greater than 50 horsepower. PCAPCD also has fugitive dust regulation, 228 which requires sites with greater than 1 acre of disturbed area to complete and obtain approval from PCAPCD of a dust control plan prior to the start of any construction activities. During operation, the area will need to obtain permits for the emergency generator and water pump. Other regulations that may apply include burning restrictions and architectural coatings limits.

PCACPD Thresholds

PCACPD has established mass emission thresholds of significance for construction and operational emissions as shown in Table AQ-2 (PCAPCD 2013). If emissions for NO_X, ROG, and PM_{10} exceed 82 pounds per day (ppd), then there would be a potentially significant impact. In addition to construction and operational emission thresholds, the PCAPCD has established cumulative significance thresholds for NOx and ROG emissions of 10 ppd.

Table AQ-2. PCAPCD Thresholds of Significance

Emission Source	NOx (ppd)	ROG (ppd)	PM_{10} (ppd)
Construction Emissions	82	82	82
Operational Emissions	82	82	82
Cumulative Emissions	10	10	--

Source: PCAPCD 2013

Placer County Idling Restrictions

As specified in Chapter 10, Article 10.14 Limitation on Engine Idling, of the Placer County Code, Placer County has restrictions on vehicle idling that includes limits of idling time to 5 consecutive minutes, limiting idling within 1,000 feet of a residential area or school, and vehicle driver or equipment operator notification requirements. (Placer County 2003).

3.3.2 Environmental Setting

The project site is located in Placer County near the city of Auburn in the Sacramento Valley Air Basin. The project site is located in the foothills of the Sierra Nevada at elevations ranging from 1,560 to 1,770 feet above mean sea level (msl) with higher elevations to the east in the mountains and relatively level Sacramento Valley terrain to the west. The weather in Placer County near the project site is generally Mediterranean with hot, dry summers and cool, wet winters. Approximately 34 inches of rainfall occur in the Auburn area and infrequent snowfall (WRCC 2016).

The Sacramento Valley Air Basin, including the portion of Placer County within the basin, is designated as a federal and state non-attainment area for ozone, and a state non-attainment area for PM_{10}. The Sacramento Valley Air Basin is in attainment or unclassified for all other federal and state criteria air pollutants, as shown in Table AQ-1.

The CCC's Placer Center currently operates on the project site. The nearest sensitive receptors to the project site include the Placer Nature Center, approximately 240 feet to the north, and residential homes, approximately 450 and 525 feet to southwest and west, respectively. The nearest school (Forest Lake Christian School) is approximately 2.25 miles north-northeast of the project site, though there is a daycare facility (Christine's Lil' Tots Daycare) approximately a 0.5 mile south of the site. The nearest medical facility to the project site is One River Medicine, located approximately 2.75 miles west of the project site. An elderly care facility, Always Best Care, is located approximately 2 miles south of the project site. No other elderly care facilities, child care centers, or other sensitive receptors are located near the project site.

3.3.3 Discussion of Checklist Responses

a. Conflict with or obstruct implementation of the applicable air quality plan—*No Impact*

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 the applicable air quality plan 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. Ozone plans have been developed to address the ozone non-attainment status of the Sacramento Federal Ozone Non-attainment Area and indicates measures for control of ozone precursor emissions in the applicable State Implementation Plan. In its 2015 Triennial Progress Report (PCAPCD 2015), the PCAPCD outlined its current progress toward attainment of the ozone standards and potential control measures to further reduce emissions. The project is consistent with all measures identified in the ozone plan. Since the area may experience one-hour ozone concentrations above 0.1 ppm, the PCAPCD developed an Emergency Ozone Plan. The Emergency Ozone Plan requires various notification and recommended cessation of ozone emitting activities if ozone levels reach or are predicted to reach certain trigger levels. If an emergency ozone event occurs, the project may be requested to cease construction activities during the projected ozone emergency, which if applicable to the project, the project would comply with as soon as it is safe to do so. No attainment plans are required for the state PM_{10} standards. Since the air quality plans applicable to the Proposed Project consider development of the project site for uses consistent with the proposed uses, the Proposed Project is consistent with air quality plans.

The Proposed Project would follow all federal, state, and local regulations related to stationary and area sources of air pollutants. In addition, construction will follow local air district regulations for fugitive dust. Therefore, because the Proposed Project would be consistent with the applicable general plan policies and would comply with all applicable regulations for sources of air pollutants, the Proposed Project would have **no impact** and would not obstruct or conflict with applicable air quality plans.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation—*Less than Significant with Mitigation*

During construction of the Proposed Project, the combustion of fossil fuels for operation of construction equipment, material hauling, and worker trips would result in construction-related criteria air pollutant emissions. In addition, construction activities would generate fugitive dust from demolition, grading, and blasting activities. These emissions were estimated using California Emissions Estimator Model (CalEEMod) version 2013.2.2 with default assumptions for a 3.5-acre site. The Proposed Project's criteria air pollutant emissions during construction are shown in Table AQ-3. CalEEMod modeling results for the Proposed Project are provided in Appendix A.

During construction of the Proposed Project, controlled blasting to dislodge rock from the parent material may occur. The controlled blasting process considers geologic factors and the

number, depth, and spacing of explosive charges to maximize the fracturing effect of the blast while minimizing the strength of the charge and resultant vibration. Following detonation, dislodged rock would be removed, and, if necessary, new holes are drilled and the explosive charge placement and detonation process would be repeated. Criteria air pollutants emitted during detonation and blasting are primarily particulate matter emissions with some other emissions from the specific detonators used. Particulate matter emissions were estimated using the USEPA's AP-42 emissions factors chapter 11.9 Western Surface Coal Mining. In the USEPA's Table 11.9-1 emission factors for drilling and blasting are given based on the horizontal area and detailed in Appendix A. Emissions for blasting 1 acre are 66.2 pound PM_{10} per blasted acre and 3.8 pounds $PM_{2.5}$ per blasted acre. Criteria pollutants associated with detonation cannot be estimated since the amount and type of detonation material is unknown. USEPA's AP-42 emission factor chapter 13.3, Explosive Detonation, lists emission factors for CO, NOx, methane (CH_4), hydrogen sulfide (H_2S), and SO_2 for gelatin dynamite. Given the small amount of detonation material that would be used at a time, it is unlikely that these detonation emissions would be substantial.

Table AQ-3. Criteria Pollutant Emissions during Construction

Year	Total Construction Emissions (tons)							
	ROG	NO_X	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
2017	0.47	3.97	3.27	0.0042	0.18	0.24	0.066	0.23
2018	0.89	0.19	0.17	0.00029	0.0045	0.011	0.0012	0.010
Total	1.36	4.16	3.44	0.0055	0.19	0.25	0.067	0.24
Peak Daily Emissions (pounds/day)								
Peak Daily	97.1	68.3	53.6	0.094	19.6 66.2 (blasting)	3.0	10.3	2.77
Construction Significance Thresholds	82	82	---	---	82 (total)		---	---
Exceed the Thresholds before Mitigation?	Y	N	---	---	Y		---	---
Mitigated Peak Daily Emissions (low VOC)	37.9	68.3	53.6	0.094	66.2	3.0	10.3	2.77
Exceed the Thresholds after Mitigation?	N	N	---	---	N		---	---

Notes:

CO = carbon monoxide; NO_X = oxides of nitrogen; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = fine particulate matter 2.5 microns or less in diameter; ROG = reactive organic gases; SO_2 = sulfur dioxide. --- = no applicable standard.

Source: CalEEMod modeling results are provided in Appendix A.

Operational criteria air pollutant emissions would be generated by building energy use, emergency diesel generator, and a diesel-powered pump for the transport of water from the water tank for irrigational or fire flow purposes. It was assumed that there would be no change in vehicle-related emissions from existing conditions since the number of CCC staff and corpsmembers would not change from the existing CCC Placer Center operations. It was also assumed that there would be no fireplaces in the new buildings; however, the Proposed Project's wood-burning pizza oven was considered in the estimates. Most of the Proposed Project's operational emissions were estimated using default assumptions in CalEEMod version 2013.2.2. Based on CalEEMod's defaults, the water tank's pump was assumed to be 84 horsepower (hp) and operate for 260 hours per year for testing, and/or irrigation of the CCC parcel. The emergency generator was assumed to be 450 hp and operate for 1 hour, 20 days per year for testing purposes. The Proposed Project's criteria air pollutant emissions during operations are shown in Table AQ-4.

Table AQ-4. Criteria Pollutant Emissions during Operations

Source	Operational Emissions (tons/year)							
	ROG	NOx	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Area	0.575	0.0039	0.33	0.00031	—	0.024	—	0.024
Energy	0.0027	0.023	0.014	0.00015	—	0.0018	—	0.0018
Mobile	—	—	—	—	—	—	—	—
Offroad	0.06	0.51	0.50	0.00089	—	0.031	—	0.031
Waste	—	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—	—
Total	0.63	0.54	0.84	0.0014	—	0.057	—	0.057
Peak Daily Emissions (pounds/day)								
Project Peak Daily	4.53	5.54	10.6	0.019	0	0.87	0	0.87
Operational Significance Thresholds (lbs/day)	82	82	--	--	82 (total)		--	--
Exceed Thresholds of Significance?	N	N	--	--	N		--	--

Notes: Area refers to landscape emissions, architectural coatings, and consumer products; CO = carbon monoxide; NO_X = oxides of nitrogen; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = fine particulate matter 2.5 microns or less in diameter; ROG = reactive organic gases; SO_2 = sulfur dioxide, _"—" =no emissions or no emissions calculated as *de minimis*.

Source: CalEEMod modeling results are provided in Appendix A.

The estimated operational criteria air pollutants associated with the Proposed Project overestimate the regional emissions contribution because the Proposed Project would replace the existing CCC Placer Center's dormitory and multipurpose buildings. Because the Proposed Project would occur in essentially the same locations as the existing CCC Placer Center buildings and with the same number of CCC staff and corpsmembers, there would be no regional or local changes in criteria air pollutants emitted by the Proposed Project. Thus, the Proposed Project would not cause any localized exceedances of emission standards (known as "hot spots").

The PCAPCD has established mass emission thresholds. As shown in Table AQ-3, the estimated construction-related emissions associated with the Proposed Project would be less than these mass emissions significance thresholds with the use of low volatile organic compound (VOC) paints as outlined in **Mitigation Measure AQ-1**. Construction emissions, in particular fugitive dust emissions, are also controlled by implementation of construction best management practices that are outlined in a dust control plan as required by **Mitigation Measure AQ-2**. In order to ensure emissions from potential controlled blasting activities are minimized, **Mitigation Measure AQ-3** requires a limit on the amount of blasting area or implementation of other PM emission controls from blasting activities in order to reduce PM emissions such that they are below the daily PM threshold. As shown in Table AQ-4, operational emissions would be less than the PCAPCD's significance thresholds with implementation of mitigation measures. By implementing construction emission reduction measures and best management practices, the Proposed Project's impacts would be **less than significant with mitigation.**

<u>Mitigation Measure AQ-1</u>: Use Low VOC paints.

The State or its contractor(s) will use low VOC paints on all interior and exterior architectural coated surfaces. The paints will have a VOC content less than or equal to 100 grams per liter. This applies to applications during initial construction and future applications.

<u>Mitigation Measure AQ-2</u>: Prepare and Implement Dust Control Plan and Best Management Practices for Construction Air Quality.

The construction contractor will prepare a dust control plan that will be approved by PCAPCD prior to the start of any construction activities. The dust control plan will implement the following best management practices and any other measures contained in the final approved dust control plan to reduce fugitive dust emissions and construction equipment emissions during construction to the extent feasible:

- All exposed areas of bare soil (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered once per day or as needed to minimize fugitive dust emissions.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power-vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 California Code of Regulations [CCR] Section 2485). Clear signage regarding this requirement shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

- During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.

- The contractor will use construction equipment that minimizes air emissions to the extent feasible such that overall fleet emissions are equal to or less than emissions compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.

- A publicly visible sign shall be posted with the name and telephone number of the contact person at the lead agency regarding dust complaints. This person shall respond to any complaints and take corrective action within 48 hours. The PCAPCD's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure AQ-3: Limit Emissions from Controlled Blasting.

The site will limit the amount of blasting to 1 acre or implement other equally effective PM emission reduction control measures such that PM emissions are below the 82 pounds per day threshold. In addition, the facility will ensure that detonation emissions of other criteria pollutants will not result in emissions above the threshold in particular for CO and NOx once the amount of detonation material is known. If necessary, during days of detonation, other activities may be phased so that activity remains below the daily thresholds. The facility will comply with all permit conditions from the California Division of Industrial Safety.

c. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area—*Less than Significant with Mitigation*

As shown in Table AQ-1, the project site is in a region that is designated in non-attainment for ozone and PM_{10}. PCAPCD has established a 10 pound per day threshold for ROG and NOx each to determine if a project has a cumulatively considerable impact to the regional non-attainment for ozone. As shown in Table AQ-4, the peak daily emissions for operation are less than 10 pounds per day for both ROG and NOx. While no PM threshold has been adopted, the operational PM emissions are minimal and unlikely to result in a cumulatively considerable increase in PM emissions. Operational impacts would not result in a cumulatively considerable net increase of a criteria pollutant and would have a **less than significant impact**.

Construction emissions are short term and temporary in nature. It is anticipated that construction activities would occur for only a two-year time span. During this short time span, daily ROG and NOx emissions would be approximately 97 and 68 pounds per day. With implementation of the proposed **Mitigation Measure AQ-1** (use low VOC paints), daily ROG (VOC) would be reduced to approximately 38 pound per day (as shown in Table AQ-3) and the NOx emissions would remain unchanged. Both emissions after implementation of **Mitigation Measure AQ-1** would exceed the PCAPCD's cumulative 10 pound per day threshold. Thus, during the temporary years of construction, emissions, primarily generated from the use of construction equipment, would contribute to a cumulatively considerable net increase in ozone and ozone precursors, ROG and NOx. Implementation of **Mitigation Measure AQ-4** would ensure implementation of strategies to further reduce the emissions and potential cumulative effect of ROG and NOx emissions during the construction period. There would be no lasting cumulatively considerable impact once construction of the Proposed Project is complete. By implementing Mitigation Measures AQ-1 and AQ-4, the Proposed Project's impact on cumulative criteria pollutants would be **less than significant with mitigation**.

<u>Mitigation Measure AQ-4</u>: Construction ROG and NOx Cumulative Effect Reductions.

The State or its contractor(s) shall implement one or more of the following strategies to ensure that during project construction, emissions don't contribute to a violation of the ozone standard:

- Do not conduct construction activities on days designated by PCAPCD as "Spare the Air" days. This will ensure the project is not emitting ROG or NO_x emissions on the most critical days for potential ozone standard exceedances.

- The contractor will use construction equipment that minimizes air emissions to the extent feasible such that overall fleet emissions are equal to or less than emissions compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other

options as such become available. This measure would be implemented in conjunction with at least one of the other strategies identified in this mitigation measure.

- Contribute to the PCAPCD's offset mitigation program to pay to offset the total construction NO_x and ROG emissions in tons. This program is operated by PCAPCD who is responsible for finding suitable projects for funding and certifying that the mitigation has been completed. The amount of offsets are based on the actual emissions emitted during construction.

d. Expose sensitive receptors to substantial pollutant concentrations—*Less than Significant with Mitigation*

Construction

During project construction, diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as TACs could be emitted by construction equipment. Another TAC, asbestos, could be of concern during construction activities. The Proposed Project's demolition and grading activities could potentially emit asbestos or naturally occurring asbestos (NOA), respectively, if present in the buildings or soils.

The construction period for the CCC station facilities is short in duration (up to 24 months). Due to the variable nature of construction activity, 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 would result in the exposure of sensitive receptors to substantial concentrations. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In others words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (Office of Environmental Health Hazard Assessment [OEHHA] 2015). Furthermore, construction impacts are most severe adjacent to the construction area and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005).

Given the uncertainty of estimating chronic health effects over a short period, health effects from construction were not quantified. Implementation of best management practices as identified in **Mitigation Measure AQ-2** would reduce the amount of construction emissions to the extent feasible through a combination of use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. These construction practices would ensure that health effects from construction of the proposed CCC dormitory and kitchen/dining room/multipurpose room replacements are minimized for nearby sensitive receptors.

As detailed further in Section 3.8, *Hazards and Hazardous Materials*, the existing CCC dormitory and kitchen buildings that would be demolished as part of the Proposed Project

contain asbestos, which could pose an air quality risk to construction workers if not properly removed. However, implementation of **Mitigation Measure HAZ-1**, *Hazardous Materials Abatement by Licensed Contractor(s)*, would minimize the potential for improper handling, transport, and disposal of hazardous wastes, including asbestos, by requiring hazardous material abatement during demolition activities be conducted by licensed contractors. The potential risk of the Proposed Project's grading activities disturbing NOA is not significant since the project site is located in an identified "area least likely to contain NOA" (Placer County 2008).

Therefore, the Proposed Project's effect on nearby sensitive receptors due to construction-related air pollutant emissions would be **less than significant with mitigation**.

Operation

During Proposed Project operations, the diesel-powered emergency generator and the pump associated with the proposed water tank would potentially emit DPM. Depending on the final selected location for the water tank, the nearest sensitive receptors would be at least 200 feet from the pump's potential DPM emissions. The potential health impacts from this pump, which would primarily be used for irrigation and fire flows, would not significantly change from the existing conditions. The emergency generator would have occasional testing that would be conducted when people are least likely to be present. As stated above, the operation of the CCC Placer Center would not significantly change from the existing conditions. Therefore, health impacts resulting from emissions generated during operation at the proposed CCC Placer Center would have less than significant effects related to cancer, acute or chronic health risks. The impacts to sensitive receptors from operation would be **less than significant**.

The impacts to sensitive receptors from construction and operation would be **less than significant with mitigation**.

e. Create objectionable odors affecting a substantial number of people—*Less than Significant*

Diesel exhaust from construction activities as well as organic matter from disturbed soil 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 diesel fuel and exhaust for the water tank pump; these odors would be short-lived and would occur intermittently. Impacts related to potential generation of objectionable odors are thus expected to be **less than significant**.

3.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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, or regulations, or by the DFG or USFWS?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including marshes, vernal pools, and coastal wetlands) 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 (HCP); natural community conservation plan; or other approved local, regional, or state HCP?	☐	☐	☐	☒

3.4.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Federal Clean Water Act

The Clean Water Act (CWA) (33 USC Section 1251) establishes the basic structure for regulating discharges of pollutants (including dredged or fill material) into waters of the United States (U.S.), including wetlands, and for regulating quality standards for surface waters. The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

CWA Section 404 prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a permit from the U.S. Army Corps of Engineers (USACE). CWA Section 401 requires that an applicant for a federal license or permit that allows activities with the potential to result in a discharge to waters of the U.S., including wetlands, obtain a state 401 water quality certification.

Federal Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA)'s National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. The USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668; 50 CFR Part 22) prohibits take of bald and golden eagles and their occupied and unoccupied nests. USFWS administers the Bald and Golden Eagle Protection Act.

State Laws, Regulations, and Policies

California Endangered Species Act

The California Fish and Game Code (F&G Code) includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA), and the California Endangered Species Act (CESA).

NPPA (F&G Code Sections 1900–1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized under limited circumstances.

CESA (F&G Code Sections 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of F&G Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. The California Department of Fish and Wildlife (CDFW) may issue an incidental take permit, subject to specific conditions, authorizing take of listed and candidate species if that take is incidental to an otherwise lawful activity.

F&G Code Sections 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Sections 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

CDFW regulates activities that will interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the F&G Code requires that CDFW be notified of lake or streambed alteration activities. If CDFW subsequently determines that such an activity might adversely affect an existing fish and wildlife resource, it has the authority to issue a streambed alteration agreement, including requirements to protect biological resources and water quality. The Proposed Project does not propose alterations to the channel, bed, or bank of any lake, river, or stream, and would not affect any riparian habitat associated with any lake, river, or stream; therefore, the Proposed Project is not subject to notification requirements under Section 1602 of the F&G Code.

California Environmental Quality Act

Under provisions of CEQA Guidelines Section 15380(d), the project lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers plant species on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere), or

List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California as qualifying for legal protection under Section 15380(d). Species on CNPS List 3 or 4 may, but generally do not, qualify for protection under this provision.

Sensitive habitats protected under CEQA include riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the California Natural Diversity Database's (CNDDB) working list of "high priority" habitats (i.e., those habitats that are rare or endangered within the borders of California).

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies to preserve outstanding areas of native vegetation and trees, wildlife habitats and corridors, and riparian corridors; conserve significant grassland and wooded areas; and to protect threatened and endangered species and their habitat. The Placer County General Plan (2013) is generally in line with the Auburn/Bowman Community Plan and contains similar goals and policies related to biological resources.

Placer County Tree Preservation

Placer County Code Section 12.16.000 establishes provisions to preserve native, landmark, and riparian trees whenever feasible. The code requires a tree permit when more than 50 percent of the existing native trees, equal to or greater than 6-inch diameter at breast height (dbh) would be removed. Designated landmark trees are not subject to exemption and cannot be removed prior to obtaining a tree permit from the County. Projects occurring within the Auburn/Bowman Community Plan area are subject to Placer County Code Section 12.16.000.

3.4.2 Environmental Setting

Pre-Field Research

The biological resources analysis is based on pre-field investigations, onsite biological surveys, and sources of information listed as follows:

- U.S. Fish and Wildlife Service's (USFWS) Critical Habitat Database (USFWS 2015);
- CDFW California Natural Diversity Database (CNDDB) (CDFW 2015); and
- California Native Plant Society (CNPS) record search (CNPS 2015).

The above information sources were used to develop lists of special-status species and to identify other sensitive biological resources that could be present in the project region (Appendix B).

Field Surveys

A reconnaissance-level field survey was performed by biologists on December 2, 2015. Weather conditions at the time of survey were partially overcast skies, with a temperature of approximately 50 degrees Fahrenheit.

All areas with the potential to be affected by construction of the Proposed Project were either surveyed by foot or visually inspected with binoculars (10x42) during the field visit. Sensitive environmental and biological resources were recorded with a sub-meter Trimble GeoXH 2008 Global Positioning System (GPS) unit. Any observed fauna and flora were recorded, and identified to the lowest possible taxon. Survey efforts emphasized special-status species and their associated habitat with documented occurrences within 5-miles of the Proposed Project.

Natural Communities and Wildlife Habitats

The Proposed Project is located within the Sierra Nevada Foothills Floristic Province, in the unincorporated Placer County community of Christian Valley. The project site itself is primarily composed of existing dormitories, parking areas, softball field, walkways, and filled former wastewater treatment ponds. Undeveloped areas of the site are primarily characterized by mixed foothill woodlands, non-native annual grasses, ruderal vegetation and denuded (i.e., paved and gravel roads, bare ground and concrete slabs) locations.

The mixed foothill woodland in undeveloped areas of the site consists primarily of: valley oak (*Quercus lobata),* blue oak (Q*uercus douglasii*), black oak (*Quercus kelloggii*), ponderosa pine (*Pinus Ponderosa)*, gray pine (*Pinus sabiniana)* and manzanita (*Arctostaphylos sp.).* Yellow star thistle (*Centaurea solstitialis*) is a primary component of the non-native grasslands in the eastern portion of the project site. Black-tailed jackrabbit (*Lepus californicus*) and black-tailed deer (*Odocoileus* hemionus) scat was found throughout the project site, along with Gray squirrels (*Sciurus griseus*), and small rodent burrows. Acorn woodpeckers (*Melanerpes formicivorus*) and various songbirds including the Mountain chickadee (*Poecile gambeli*), and California towhee (*Melozone crissalis*) were found during the initial site reconnaissance.

A seasonal drainage ditch fed mostly by rainfall and runoff directed from the impervious surfaces of the project site starts in a culvert pipe on the south end of the site and flows southward into a residential area. The seasonal drainage was not holding water at the time of the survey. The northern section of the project site is composed of a pump house and concrete slab which are surrounded by ponderosa pine and manzanita.

Special-Status Species

Special-status species are those animal and plant species that, in the judgment of the resource agencies[1], trustee agencies[2], and certain non-governmental organizations, warrant special consideration in the CEQA process. These species include:

- Officially designated threatened, endangered, or candidate species federally listed by the USFWS and protected under the ESA.
- Officially designated rare, threatened, endangered, or candidate species state listed by the CDFW and protected under the CESA. The CDFW also maintains a list of "Fully Protected" species as well as "California Special Concern" species that are also generally included as special-status species under CEQA.
- Species considered rare, threatened, or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as plant taxa identified on lists 1A, 1B, and 2 in the CNPS Inventory of Rare and Endangered Vascular Plants of California.

Other species considered sensitive, such as nests of birds listed in the MBTA. Species may also be designated as special concern at the local level, due to limited data regarding distribution, which precludes listing them as threatened or endangered at the state and federal level.

Special-Status Plants

The special-status plant species considered for review were compiled from the query results from the USFWS, CNDDB, CNPS, and Calflora databases (the U.S. Geological Survey [USGS] Auburn quadrangle, as well as the surrounding Coloma, Greenwood, Pilot Hill, Rocklin, Gold Hill, Colfax, Lake Combie, and Wolf quadrangles.). The CNDDB search did not return any previous sighting of special-status plants within 5-miles of the project site. The suitability of the proposed project site for supporting special-status species was determined through the field survey conducted; no protocol-level surveys were conducted during the survey. No special-status plant species, or conditions favoring these species, were observed on the project site. Special-status species were determined not to have the potential to occur within the Proposed Project vicinity, either because the distribution of the species does not extend into the project footprint, or because the habitat and/or micro-site conditions (e.g., vernal pools, wetlands) required by the species are not present, due to the highly disturbed/developed habitat surrounding the project site.

Special-Status Wildlife

Both the CNDDB and USFWS Critical Habitat database queries of the Auburn and surrounding quadrangles were used to identify potential special-status wildlife species that may occur within the vicinity of the Proposed Project. The field survey found suitable nesting and

[1] Public agencies that regulate public or private activities to avoid or minimize environmental damage.

[2] A "trustee agency" is a public agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.

foraging habitat for both passerine (songbirds) and raptors (birds of prey) covered under the MBTA. As a result, both avian types have a high potential to be present within the project site.

3.4.3 Discussion of Checklist Responses

a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species—*Less than Significant with Mitigation*

Special-status Plants

The special-status plant species considered for review were compiled from the query results from the USFWS, CNDDB, CNPS, and Calflora databases. The CNDDB search (Auburn, Coloma, Greenwood, Pilot Hill, Rocklin, Gold Hill, Colfax, Lake Combie, and Wolf quadrangles) returned the plants listed in Table BIO-1. The suitability of the project site for supporting special-status species was determined through the field survey; no protocol-level surveys were conducted during the survey.

No special-status plant species, or conditions favoring these species, were observed on the project site. The potential for special-status plant species to occur near the project site is considered minimal because the distribution of the species does not extend into the project footprint, or because the habitat and/or micro-site conditions (e.g., vernal pools, wetlands) required by the species are not present due to the highly disturbed/developed habitat surrounding the project site. Therefore, the Proposed Project would have no impact on special-status plants.

Table BIO-1. Special Status Plants

Scientific Name	Common Name	Status: Federal /State/ CDFW	Preferred Habitat	Probability of Occurrence
Calystegia stebbinsii	Stebbins' morning-glory	E/E/--	Gabbroic. Chaparral Cismontane woodland.	None. Suitable habitat not present onsite.
Ceanothus roderickii	Pine Hill ceanothus	E/R/--	Serpentinite or gabbroic. Chaparral Cismontane woodland.	None. Suitable habitat not present onsite.
Galium californicum ssp. sierrae	El Dorado bedstraw	E/R/--	Gabbroic. Chaparral Cismontane woodland. Lower montane coniferous forest.	None. Suitable habitat not present onsite.
Packera layneae	Layne's ragwort	T/R/--	Serpentinite or gabbroic, rocky. Chaparral Cismontane woodland.	None. Suitable habitat not present onsite.

CT = Candidate Threatened
E = Endangered
FP = Fully Protected
PT = Proposed Threatened
R = Rare
SSC = Species of Special Concern
T = Threatened

Special-status Wildlife

The CNDDB and USFWS Critical Habitat database queries were used to identify potential special-status wildlife species that may occur within the vicinity of the Proposed Project (Table BIO-2).

Table BIO-2. Special Status Wildlife

Scientific Name	Common Name	Status: Federal /State/ CDFW	Preferred Habitat	Probability of Occurrence
Accipiter gentilis	northern goshawk	--/--/SSC	Prefers old growth stands of red fir, Jeffrey pine, Ponderosa pine, lodgepole pine, Douglas fir, and mixed conifer forests. Usually nests on north slopes and near water.	Low. This species has been observed in the Auburn area (ebird.org 2016). However, the project site lacks old growth conifer stands preferred for nesting and foraging. Presence of this species onsite is low.
Agelaius tricolor	tricolored blackbird	--/--/SSC	Fields, farms, cattails and marshes.	None. This species is not associated with woodlands found on the project site. Suitable habitat not present onsite.
Cypseloides niger	black swift	--/--/SSC	Riparian woodland of deciduous trees, including canyon bottoms, on river floodplains, and in live oaks.	None. Suitable riparian habitat not found in the vicinity of the project site.
Emys marmorata	western pond turtle	--/--/SSC	Marshes, streams, rivers and ponds.	None. No suitable bodies of water found in vicinity of the project site.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	T/--/--	Associated with elderberry plants.	None. No elderberries found in vicinity of the project site.
Haliaeetus leucocephalus	bald eagle	--/E/FP	Nests and roosts in coniferous forests within a mile of a major water body.	None. Suitable habitat not present onsite.
Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	T/--/--	Sacramento and San Joaquin Rivers.	None. Suitable habitat not present onsite.

Scientific Name	Common Name	Status: Federal /State/ CDFW	Preferred Habitat	Probability of Occurrence
Pekania pennanti	fisher - West Coast DPS	PT/CT/ SSC	Coniferous forests and montane riparian habitats with a high percentage of canopy cover.	None. Suitable forest type not found in vicinity of project site.
Phrynosoma blainvillii	coast horned lizard	--/-- /SSC	Foothill riparian, woodland, and grassland habitats.	Low. Suitable habitat is present on the project site but nearest sighting is approximately 9 miles northeast of the project site.
Rana boylii	foothill yellow-legged frog	--/-- /SSC	Small to moderate streams with shallow flowing water and some cobbles.	None. Suitable water body not found in vicinity of project site.
Rana draytonii	California red-legged frog	T/-- /SSC	Requires aquatic breeding and upland dispersal habitats.	None. Suitable water body not found in vicinity of project site.
Riparia riparia	bank swallow	--/T/--	Colonial nester along streamside and riparian habitats. Seldom seen away from water.	None. Suitable water body not found in vicinity of project site.

CT = Candidate Threatened
E = Endangered
FP = Fully Protected
PT = Proposed Threatened
R = Rare
SSC = Species of Special Concern
T = Threatened

The entire project site was inspected on foot with careful observation of wildlife species. However, the time of year (late Fall/Early Winter) when the survey was conducted coincides with relatively low wildlife and nesting bird activity. Suitable nesting trees, soil areas that may support burrows, and shrub and grassland areas were inspected closely for signs of previous nesting or burrowing activity. Based on the survey results and the disturbed habitat conditions and extensive human use of the area, the project site is unlikely to support special-status wildlife species. However, suitable nesting and foraging habitat for both passerine and raptors covered under the MBTA are present on or near the project site. **Mitigation Measure BIO-1** requires pre-construction surveys for nesting birds by a qualified biologist and no-disturbance buffers if necessary. Potential impacts to special-status birds would be **less than significant with mitigation**.

<u>Mitigation Measure BIO-1</u>: Perform Nesting Bird Surveys

If vegetation removal or ground disturbance are initiated during the nesting season (typically February 15 to September 1), a focused survey for active bird nests shall be conducted by a qualified biologist within 15 days prior to the beginning to construction activities. If nesting birds are detected, a no-disturbance buffer shall be established around the nest. Buffers shall be 500 feet for non-listed raptors and 100 feet for non-listed passerines. A qualified biologist may identify an alternative buffer based on a site specific-evaluation and in consultation with CDFW. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival. If listed species are detected, the Lead Agency shall consult with CDFW and the USFWS regarding appropriate action.

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

No riparian habitat or other sensitive natural community exists within the project site, and therefore, **no impact** would occur.

c. Substantial adverse effects on federally protected wetlands—*Less than Significant*

Portions of the drainage ditches at the project site may be re-contoured or have culvert pipes installed in them as a part of site improvements for the project. The drainage ditches mostly convey runoff from the project site, but could have at one time represented natural drainage conditions and have connectivity to Waters of the U.S. Therefore, they may be subject to the jurisdiction of the USACE under the Clean Water Act. While improvements or fill to the ditches could be subject to USACE jurisdiction, the effects are likely to be *de minimis*, and would not represent a substantial adverse impact to federally protected wetlands. The CCC would still be required to comply with Section 404 of the Clean Water Act. This impact would be **less than significant**.

d. Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites—*Less than Significant with Mitigation*

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations. The Proposed Project is in an existing, developed site with a high level of human use. As such, the project site does not function uniquely or effectively as a wildlife movement corridor. However, construction noise from blasting or other activities at the project site would potentially affect wildlife movement or nesting. To minimize noise-related impacts on local nesting birds, **Mitigation Measure BIO-1** would be implemented to establish a no-disturbance buffer around any nests. Therefore, this impact would be **less than significant with mitigation.**

e. Conflict with local policies or ordinances protecting biological resources—*Less than Significant*

Projects within the Auburn/Bowman Community Plan area are subject to Placer County Code Section 12.16.000 and may require a tree permit prior to tree removal. Although the Proposed Project is not subject to local ordinances, the CCC conducted a tree inventory of native and ornamental trees with the potential to be removed during project implementation. This inventory consisted of tree species, location, dbh, and general condition of health. Results of the inventory will be incorporated into project designs to avoid, whenever feasible, the removal of native trees during construction activities. As such, most project-related activities would take place in currently developed or disturbed areas that support relatively few trees. No designated landmark trees are present on the project site, but any native oaks removed by the project will be replaced onsite with a one-to-one ratio. The Proposed Project would not conflict with other local policies or ordinances protecting biological resources. Therefore, this impact would be considered **less than significant**.

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

The project site is not within or subject to an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Planning (NCCP). There would be **no impact**.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	☐	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
e. Cause a substantial adverse change in the significance of a tribal cultural resources as defined in Section 21074?	☐	☐	☐	☒

3.5.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to cultural resources and the Proposed Project.

State Laws, Regulations, and Policies

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or

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

Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section21083.2.

Assembly Bill (AB) 52, which was approved in September 2014 and which went into effect on July 1, 2015, requires that state lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a Proposed Project, if so requested by the tribe, and the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill, chaptered in CEQA Section21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is a project that may have a significant effect on the environment. This latter language will be added to the CEQA checklist on or before July 1, 2016 and, as a result, is addressed in this IS/MND under Section 3.5.3.

Defined in Section21074(a) of the Public Resources Code, TCRs are:

(1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or

    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section21074 as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section21080.3.2, or according to Section21084.3. Section 21084.3 identifies mitigation measures than include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines SectionSection15064.5 also prescribes the processes and procedures found under Health and Safety Code SectionSection7050.5 and Public Resources Code Section Section5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section Section15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code SectionSection5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands.

California Register of Historical Resources

Public Resources Code Section Section5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic

Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Are associated with the lives of persons important in our past;

3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

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

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan contains three goals pertaining to cultural resources: preserve and enhance significant cultural resources and their surrounding environments; preserve and improve the integrity of historic buildings; and encourage a variety of cultural activities that contribute to the Auburn area. The Auburn/Bowman Community Plan acknowledges the sensitivity of the region for cultural resources and the policies attached to the goals support the identification and protection of cultural resources, including requiring studies for land development projects and protection of significant resources "over recordation and/or destruction." The Placer County General Plan contains one goal that is designed to identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites, and their contributing environment. The goal is supported by a number of policies that are designed to encourage private property owners to preserve historic resources, and discretionary development projects must be designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. The policies, furthermore, require consultation with the Native American community and qualified archaeologists when evaluating the significance of resources and appropriate mitigation measures.

3.5.2 Environmental Setting

Prehistory

Archaeological research since the 1950s has resulted in the accumulation of a substantial body of knowledge regarding early Native American habitation in the Sierra Nevada. Investigations begun in the 1950s focused on the examination of prehistoric sites throughout the Lake Tahoe vicinity, including the lake shoreline and the high Sierran crest east of the lake (Heizer and Elsasser 1953; Elsasser 1960). This research led to the designation of two chronologically and spatially distinct archaeological manifestations. The Martis Complex, archaeologically defined by the characteristic heavy use of basalt for tools, was believed to

date to the period from 2,000 to 4,000 years ago. The subsequent Kings Beach Complex was associated with bow and arrow technology, as well as a greater use of obsidian and silicate materials. Technological developments oriented toward the extensive use of local fisheries and piñon nuts were also apparent (Heizer and Elsasser 1953).

Work in the region since the 1970s has led to important modifications to the earlier sequence of archaeological developments. These included the presence of several pre-Martis manifestations, termed the Tahoe Reach and Spooner phases, and the division of the Martis and Kings Beach complexes into five more refined phases Moratto (1984).

Table CR-1. Tahoe Area Cultural Sequence

Period/Phase	Date	Archaeological Time Markers
Late Kings Beach Phase	Historic Contact to AD 1200	Desert Side Notched and Cottonwood Series Points, small chert tools, shallow saucer-shaped house pits
Early Kings Beach Phase	AD 500 to 1200	Eastgate and Rose Spring series points, small chert tools, some shallow saucer-shaped house pits
Late Martis Phase	500 BC to AD 500	Corner Notched and eared points of the Martis and Elko series, large side notched points, basalt bifaces and tools, steep-sided house pits
Middle Martis Phase	1500 BC to 500 BC	Steamboat and other point styles of the Martis and Elko series, large basalt bifaces and other tools, light colored basalt artifacts
Early Martis Phase	2000 BC to 1500 BC	Contracting stem points of the Martis and Elko series, large basalt bifaces and other tools, light colored basalt artifacts
Spooner Phase	5000 BC to 2000 BC	Points in the Pinto and Humboldt series, light colored basalt Artifacts, millingstones
Tahoe Reach Phase	6000 BC	Parman-like points (Great Basin Stemmed series)

Source: Moratto 2004; URS 2015.

Work conducted along the American River and in the vicinity of Auburn has identified a large number of sites, but archaeological research in the region has been sparse. Information garnered from archaeological study indicates that inhabitants on the west flank of the Sierra Nevada were influenced by their neighbors in the higher Sierra and the Great Basin, as well as the cultures of the Central Valley (Moratto 2004).

Ethnography

The Nisenan, or Southern Maidu, occupied the area that encompasses the project site. The Nisenan territory included the drainages of the Yuba, Bear, and American rivers and the lower drainages of the Feather River, extending from the crest of the Sierra Nevada to the banks of the Sacramento River. Kroeber (1925) identified three dialects among the Nisenan; Valley

Nisenan, Northern Hill Nisenan, and Southern Hill Nisenan. The project site is in the territory occupied by the Northern Hill Nisenan.

The Nisenan territory was divided into several political divisions or "tribelets," each with its own headman who resided in the larger village within the tribelet area. The tribelet associated with the project site occupied the territory between the Bear River and the Middle Fork of the American River. Several named villages have been identified in the region around Auburn: *Molma*, *Bisian*, and *Hangwite* (Dixon 1905; Kroeber 1925; Wilson and Towne 1978); however, none of these are in the vicinity of the project site. According to Kroeber (1925), the larger villages could have had populations in excess of 500 individuals, although small settlements consisting of extended families with 15 to 25 people were more common in the foothills.

Nisenan people followed a seasonal pattern of food gathering, as did most California Indians. Throughout California, various species of oak provided the most important staple food, although the black oak was apparently the most preferred (Matson 1972). Acorn harvests in the early fall provided the region's native inhabitants with a reliable, large-scale food source that could sustain populations through the winter months. Other important vegetal foodstuffs capable of being stored for long periods included nuts from the grey pine, buckeye, and hazelnut. Various roots, nuts, wild onion, wild sweet potato, and many varieties of grasses, berries, and fruits were also gathered at various times. Many were processed and stored for winter use, although fresh fruits, such as berries, wild plums, and grapes were likely consumed fresh (Wilson and Towne 1978).

Hunting was accomplished using various techniques and weapons, including the bow and arrow, drives, and decoys. Nets, traps, rodent hooks, and fire were all used in hunting small game. Fish could be caught with nets, gorges, hooks, and harpoons within the larger perennial drainages of the foothill region. One technique apparently involved using soap root and turkey mullein to poison the water so fish could be easily gathered. Freshwater clams and mussels were also gathered in the larger waterways, such as the Sacramento River. Other aquatic food sources available to native populations near the project site would have included salmon and sturgeon, which would have been netted or caught with the aid of weirs.

Euro-American contact with the native cultures began with infrequent excursions by Spanish explorers and Hudson's Bay Company trappers traveling through the Sacramento and San Joaquin valleys in the early 1800s. In general, indigenous lifeways remained stable for centuries until the early to middle decades of the 19th century. With the coming of Russian trappers and Spanish missionaries, cultural patterns began to be disrupted as social structures within and among groups were stressed. An estimated 75 percent of the Valley Nisenan population died in the malaria epidemic of 1833. With the influx of Europeans during the Gold Rush era, the population was further reduced as a result of disease and violent relations with the miners. However, today the Nisenan are reinvesting in their traditional culture. Through newfound political, economic, and social influence, they now constitute a growing and thriving native community in California.

History

Placer County is one of the earliest established counties in California and was formed in 1851 from parts of Sutter and Yuba Counties. Auburn, originally known as Wood Dry Diggings, was

one of the earliest mining camps in California. It was settled in 1848, and became the county seat in 1851 (Kyle et al. 2002). Because of its central location in gold country, Auburn became a major shipping and supply center for gold camps in the area. The city incorporated in 1860, and by 1865, the Central Pacific Railroad had established a depot there. For many years, Auburn was the center of the railroad's staging and freight operations. Gold mining remained a major industry in Auburn into the 1880s, but by the turn of the 20th century agriculture and timber had replaced it as the main enterprises in the region.

The project site was part of the Lovell Ranch by the mid-1950s. High-quality iron ore was discovered on the property in 1857 but there was little effort to mine the material until the railroad was completed. The Central Pacific Railroad provided a way to transport the ore to San Francisco where it could be shipped to mills for processing. By early 1869, the company of Brown & Co. was mining and sending limited amounts of iron ore to San Francisco via train. J. R. Brown and his associates incorporated the Iron Mountain Company in December 1869, with the goal of obtaining financial backing from the State to develop a processing plant at the location of the mine. The bill, which was designed to promote the mine, failed to pass the legislature and the development of the Iron Mountain Company was delayed until private capital could be raised (Thompson and West 1882).

A group of investors purchased the 640 acres that comprised the Iron Mountain Company in 1880 and proceeded to construct a smelting plant at the mine. They then purchased another 7,620 acres of wooded land in order to have fuel to run the mine and plant (Allen 1994). The mine and iron works operated from April to September 1881 and employed 177 men.

The Iron Mountain Company constructed a small town in close proximity to the iron works for the convenience of the workers. The town was named Hotaling, after one of the company's investors. Numerous buildings were erected, including twelve cottages, a large dining hall, and offices for the superintendent and clerks who were employed at the company (Thompson and West 1882). A school house was also built and a post office was established in September 1881 (Allen 1994).

The operations suffered some setbacks. Early on, in August 1881, a reservoir dam collapsed and flooded Hotaling with 5 to 6 feet of water. The deluge swept away the company office, one of the cottages, and a two story boarding house, all of which were salvaged. The iron works continued to operate for another month before they were shut down for improvements.

The mine reopened in 1882 as the California Iron and Steel Company, and employed 300 men. A large fire spread through the foundry, engine room and coal house, causing the operations to be shut down. The company began to rebuild the foundry in February 1883, and by May operations were, once again, on line. The mine and ironworks continued to operate sporadically into 1886 when it was shut down for good. The company turned over their haul roads to Placer and Nevada counties in 1888. The main road to the iron works, Hotaling Road, is now Christian Valley Road (Allen 1994).

By 1892 the iron works buildings had been removed from the site, although tons of iron ore were still present, along with portions of the smelting furnace. Some of the buildings remained at least until 1906 (Allen 1994). The original 640 acres of the mining company were

purchased by John W. Barnicott, of Newcastle, in 1912. Barnicott apparently reopened the mines and continued to operate in a limited capacity until the late 1920s (Allen 1994)

Construction of the Placer Center facility began in about 1948 by the California Department of Forestry and Fire Protection, today known as CAL FIRE. Minimum security inmates from the Department of Corrections worked at the facility during its early years, whereby the name "Honor Camp No. 7" came into being (Allen 1994). The facility operated during a period when the CAL FIRE was already an established agency with many such facilities located throughout California. Research does not support that this particular facility played an important role.

The CCC was created by Governor Jerry Brown in 1976. The program is modeled after the 1933 federal program created by President Franklin Roosevelt (CCC 2015a). By 1978, there were more than 1,000 corpsmembers and they lived at 15 residential centers spread across California. That same year, the CCC completed 304 projects throughout the state (CCC 1978).

In 1978, the Placer Center became one of eight fire centers jointly operated by the CCC and CAL FIRE. The center became the combined Energy Center for the CCC in 1984, incorporating its E-Con, weatherization, and solar programs. The Construction Unit was added to the center in 1996. The Placer Center corpsmembers work on projects sponsored by a variety of agencies such as Tahoe Resource Conservation District, California Department of Parks and Recreation, Placer County Water Agency, and CAL FIRE. The projects undertaken by the Placer Center are categorized as either construction or resources. Construction projects include: construction crews for office remodels, carport and steel building construction, and the building of decks and bridges. Resource-related projects include: landscaping, constructing and maintaining trails, building and rehabilitating parks, clearing streams, removing brush to reduce the risk of wildfire, and planting native plants and trees (CCC 2015b). In 1978, the corpsmembers completed work at the Placer Center to accommodate female corpsmembers by remodeling the dormitory (CCC 1978).

Cultural Resources Studies

Cultural resources include prehistoric archaeological sites; historic-era archaeological sites; TCRs; and historic buildings, structures, landscapes, districts, and linear features.

A records search was conducted in October 2015 by the North Central Information Center of the California Historical Resources Information System at California State University, Sacramento. The purpose of the record search was to identify the presence of any previously recorded cultural resources within the project site, and to determine if any portions of the project site had previously been surveyed for cultural resources. The records search encompassed the project area of potential effects (APE), as well as a 0.50-mile study radius around the project site.

According to the records search results, no previous cultural resource investigations were completed within the project site, although three have been completed within the 0.5-mile study radius. The CCC provided a copy of an additional report of an archaeological survey from 2009 for a new water/sewer line at the Placer Center, of which the northernmost 400 feet were in the current project's APE. These four reports are listed in Table CR-2.

Table CR-2. Cultural Studies Previously Conducted in the Project Area

NCIC Report No.	Author	Date	Title	Location of Study
4122	Jensen & Associates	1999	Archaeology Inventory Survey, Proposed Stanley Drive Planned Development, c. 38 acres North of Auburn, Placer County, California	0.50-mile study radius
4130	Foothill Archaeological Services	1991	An Archaeology Reconnaissance of the Meadow Wood Estates Project, Placer County, California	0.50-mile study radius
10406	Windmiller, Ric	2010	Warren Property Wetlands Restoration, Cultural Resources Inventory and Evaluation, Placer County, California	0.50-mile study radius
--	Harrington, Lori	2009	Letter Report for an Archaeological Evaluation of the California Conservation Corps Placer Water Connection Project, Auburn, Placer County, California	Partially in APE

Source: California State University, Sacramento 2015

The record search identified one recorded archaeological resource within the 0.50-mile study area. This resource, an extensive lithic tool scatter and an unmortared rock foundation, is located about a 0.45 mile from the project site. The record search also revealed a recorded resource within the project APE. The site, P-31-246/H (CA-PLA-120/H), was documented in 1961. The prehistoric component of the site is described as a village whose location was "pointed out to Mrs. [Lizzy] Enos by her aunt many years ago," but has been "possibly destroyed already" since the village was abandoned by 1850 (Riddell 1961). The site is referred to as *dape pakan*, or "Coyote Spring." The historic component is the Hotaling site, a historic town, which was built to accommodate the large iron-ore mine operated by the California Iron Company until 1881. The site record did not indicate that the location of the Native American site was ever verified.

A fax request to the Native American Heritage Commission (NAHC) was made on October 7, 2015 pursuant to Public Resources Code Section 21080.3. The NAHC responded on October 23, 2015. The response from the NAHC indicated that no cultural resources or areas of sensitivity are on file within or in the vicinity of the project site. The NAHC also provided a list of tribes whose sphere of influence encompasses the project site. No California Native American tribes had contacted the CCC and formally requested to be informed, through notification, about proposed projects in the geographic area within which they have a traditional and cultural affiliation pursuant to PRC 21080.3.1(b) by the time this Draft IS/MND was prepared. As a result, the CCC did not undertake formal consultations with tribes pursuant to PRC 21080.3.1(d). The CCC did, however, consult with tribes about the project, as discussed below.

A second request was made on November 11, 2015 to the NAHC for a list of individuals who might have additional knowledge about tribal resources in the project site. The NAHC

responded on November 23, 2015, and the individuals identified were contacted by letter mailed on December 15, 2015 (Table CR-3). A follow-up phone call was made on January 8, 2016 to ensure that the letter was received by all those contacted, with the exception of Mr. Coney, who had responded earlier, as described below.

Table CR-3. Native American Contacts

Name of Contact	Organization/Tribe	Letter Date	Telephone Follow-up Date	Comments
Mr. Jason Camp, Tribal Historic Preservation Officer (THPO)	United Auburn Indian Community (UAIC) of the Auburn Rancheria	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number.
Mr. Grayson Coney, Cultural Director	T' si-Akim Maidu	December 15, 2015	n/a	Mr. Coney responded by phone on December 29, 2015. Mr. Coney noted that several sites are located in the project vicinity. He requested being able to conduct his own survey of the area. A field visit was conducted on January 20, 2016.
Mr. Darrel Cruz, THPO	Washoe Tribe of Nevada and California	December 15, 2015	January 8, and January 19, 2016	Voicemail box was full and could not leave a message. An email was sent to Mr. Cruz on January 19, 2016. Mr. Cruz responded on the same day, saying that he deferred to UAIC, given the project's location.
Ms. Pamela Cubbler	Colfax-Todds Valley Consolidated Tribe	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number.
Mr. Daniel Fonseca, Cultural Resources Director	Shingle Springs Band of Miwok Indians	December 15, 2015	January 8, 2016	Left a detailed message. Mr. Fonseca returned call on January 12, 2016 and stated that he would respond by letter.
Chairperson Nicholas Fonseca	Shingle Springs Band of Miwok Indians	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number.
Ms. Rose Enos	No affiliation	December 15, 2015	January 8, 2016	Mr. Enos would like to be contacted if any human remains are discovered.
Mr. Marcos Guerrero, Tribal Preservation Committee	UAIC	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number. A follow-up email was sent on January 21, 2016 in response to Mr. Cruz's email (see above). Mr. Guerrero responded via email on February 17, 2016, requesting a site visit.

Name of Contact	Organization/Tribe	Letter Date	Telephone Follow-up Date	Comments
Ms. Judith Marks	Colfax-Todds Valley Consolidated Tribe	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number.
Ms. Eileen Moon, Vice Chairperson	T' si-Akim Maidu	December 15, 2015	January 8, 2016	The number provided on the Contact List, when dialed, said "couldn't be completed at this time."
Mr. Hermo Olanio, Vice Chairperson	Shingle Springs Band of Miwok Indians	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number.
Chairperson Don Ryberg	T' si-Akim Maidu	December 15, 2015	January 8, 2016	The number provided on the Contact List, when dialed, said "couldn't be completed at this time."
Chairperson Gene Whitehouse	UAIC	December 15, 2015	January 8, 2016	Message left on an answering machine with a return phone number. Chairperson Whitehouse responded by mail in a letter dated February 8, 2016. Chairperson Whitehouse requested additional information about the project area, such as records search results and the survey report.

Mr. Grayson Coney, Cultural Director of the T' si-Akim Maidu tribe, responded to the request for information letter by telephone on December 29, 2015. Mr. Coney grew up in the project vicinity and noted that there are several sites in the area. He also provided some information about the historic site of Hotaling. Mr. Coney requested a site visit, and an opportunity to review the grading plans for the project while in the field; he also requested copies of the final cultural resources report and botanical report. The CCC/Department of General Services (DGS) followed up with Mr. Coney's request for a field visit, and conducted a site inspection with him on January 20, 2016. Mr. Coney shared information that he had about the T' si-Akim Maidu tribe's affiliation with the project location, and noted that the area was used for gathering pigments and harvesting bulbs. While walking over the project site, Mr. Coney recognized that most of the area has been terraced to accommodate the existing facilities, and likely the earlier mining-related buildings. No Native American artifacts were observed by Mr. Coney during the site visit. He stated that he didn't expect that anything would be found during construction, except for possible isolated artifacts. If a site is discovered, he asked to be contacted.

During the follow-up phone call of January 8, 2016, Ms. Rose Enos requested that she be notified if any human remains are discovered during project construction.

Mr. Daniel Fonseca, Cultural Resources Director for the Shingle Springs Rancheria, responded by letter on January 12, 2016. Mr. Fonseca noted that the Shingle Springs Band of Miwok Indians are not aware of any known sites in the project site. However, he requested continued consultation on the project and copies of record search materials and completed reports.

At the prompting of a follow-up email on January 19, 2016, Mr. Darrel Cruz, the Washoe Tribe THPO, responded that same day. Mr. Cruz deferred to the UAIC for this project, due to its location.

Chairperson Gene Whitehouse responded in a letter dated February 8, 2016, in which he requested copies of record search results, the archaeological survey report, and any other environmental information pertinent to the project. In an email on February 17, 2016, Mr. Marcos Guerrero, of the UAIC Tribal Preservation Committee, requested a visit to the project site. DGS met with Mr. Guerrero, Mr. Mathew Moore (UAIC THPO), and Mr. Alan Wallace to tour the Placer Center on March 1, 2016. Mr. Wallace provided information that the area all along Orr Creek, which lies just south of the CCC property, including the Placer Center location, was used by the Enos family and others in the late 19th and 20th centuries. No specific Native American artifacts were observed on the ground surface during the site visit, although three pieces of fire-affected rock, which fit together, were noted at the edge of a low, lichen-covered rock outcrop situated south of the existing dormitory building.

Based on ancestral knowledge, as referenced in the CA-PLA-120/H site record and through UAIC oral history, of the Placer Center location as an area used by the Maidu, along with the presence of the piece of fire-affected rock, the UAIC requested that shovel test pits (STPs) be placed in the area around the rock outcrop south of the dormitory building. The presence of lichen on the outcrop indicates that it has been exposed for some time, thus the immediate area around it has likely experienced less disturbance than other portions of the CCC Placer Center property, increasing the possibility of buried cultural materials in the area. The UAIC also requested that an ethnographic study, focusing on the CA-PLA-120/H location, be conducted to explore whether it might qualify as a TCR.

A request was made to the Placer County Historical Society via email on December 17, 2015 for any information the organization may have about significant historic-era resources within the project site. There has been no response from the historical society, to date.

Cultural resources studies of the project site were conducted by individuals who meet the U.S. Secretary of the Interior's professional requirements for archaeology and architectural history. The archaeological survey of the project site occurred on December 3, 2015 (AECOM 2015). The field study included pedestrian transects spaced no more than 50 feet apart. Although much of the direct project study area consists of buildings and hardscape features (i.e., parking lots and sidewalks), the APE around the facilities, including the water tank, was thoroughly inspected for any evidence of archaeological materials or features. Areas of rodent disturbance and drainage cuts were inspected for the presence of subsurface materials, and grass cover was periodically removed in areas with limited surface visibility. All bedrock outcroppings were inspected for mortar depressions or milling slicks. At the request of the UAIC, an Extended Phase I (XPhI) testing program was conducted directly south of the existing dormitory in an area that appeared to be less disturbed by development. The XPhI investigations were conducted by qualified archaeologists on March 30, 2016 (Horizon 2016). Mr. Alan Wallace, of UAIC, was present during the fieldwork. Twelve STPs were excavated. The results of the testing program are described below.

The project site was visited by an architectural historian who meets the U.S. Secretary of the Interior's professional requirements for architectural history on September 22, 2015. Detailed photographs were taken of the Placer Center facilities, with particular attention

given to those buildings scheduled for demolition. Additional research about the property involved reviewing documents in the government document section and the California History Room of the California State Library. DGS also provided the original design plans for the Placer Center.

Archaeological Resources

No archaeological resources were identified within the project site as a result of the archaeological survey. However, during the archaeological survey, Placer Center staff reported that they had observed cut nails among the roots of a fallen oak (Starkey, pers. comm., 2015). These data indicate that some remnants of Hotaling (or Honor Camp No. 7) may be buried at the project site.

The XPhI investigation consisted of twelve STPs placed just south of the existing dormitory building and around a low bedrock outcropping (Figure CR-1). The STPs ranged from 3 to 30 centimeters in depth; all soil was screened through ¼-inch wire mesh. Bedrock was encountered in one STP at 3 centimeters, a layer of decomposing granite was encountered in 6 STPs at depths ranging from 8 to 20 centimeters, and dense roots were discovered in two STPs. Soil in the remaining 3 STPs was generally a moist brown to red-brown silty loam, although the top 2 to 4 centimeters were often dark brown. No Native American items were discovered in the STPs; historic-era materials were limited to one round nail, several small pieces of clear glass, one fragment of aqua glass, and two recent pennies.

TCRs

No definitive TCRs were identified at the project site through current consultations with Native American tribes, although UAIC oral history refers to the site as *dape pakan*, or "Coyote Spring." Additional research may reveal the location as a TCR, as discussed in Section 3.5.3.e, below.

Built Resources

Data collected during the field review and through archival research were used for recordation of the Placer Facilities on California Department of Parks and Recreation (DPR) forms 523 (form DPR 523). The DPR form details the evaluation of the Placer Center site for the NRHP, CRHR, and California State Landmarks (Landmarks) eligibility (Ambacher 2015; see Appendix C).

The main area of the facility consists of 15 buildings arranged in almost a rectangular configuration facing asphalt parking lots and some grass and trees. Eight of the buildings were constructed between 1948 and 1952; these buildings are identified by number in Figure CR-2. The remaining seven buildings were constructed between 1981 and 1993 and were not evaluated for the CRHR because they are less than 45 years in age. A water tank, which is located uphill and about 750 feet north of the facility complex, was also evaluated for the CRHR and NRHP.

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N

0 20 40
Feet

Shovel Test Pit

Fire Cracked Rock

Horizon WATER and ENVIRONMENT

Figure CR-1
Extended Phase I
Shovel Test Pit Locations

Kitchen/Dining Hall/
Multipurpose Room
and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

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Prepared by:

Horizon WATER and ENVIRONMENT

Prepared for:
California Conservation Corps

Placer Center Boundary

N

50 0 50 100

Feet

Figure CR-2
Buildings Evaluated at the CCC Placer Center

Kitchen/Dining Hall/ Multipurpose Room and Dormitory Replacement
Initial Study/Mitigated Negative Declaration

Building 1, is a warehouse/classroom building that is situated in the northwest corner of the property.[3] It is a single-story building with a rectangular plan. It has a side gable roof clad in corrugated metal with vents at the roof's ridgeline. Beneath each gable is a square vent, one louvered and one covered with a screen. The building is sheathed in a combination of T-111 siding and corrugated metal. On the west elevation is a shed roof addition with wood posts. This elevation also features an original sliding door.

In addition to the entrance on the west elevation, entrances are set with a replacement single-entry paneled door, steel rollup doors, a steel single-entry door, and a set of steel double-doors. Fenestration is a mixture of fixed ribbon windows with wood frames and 6/3 steel frame awning windows.

Building 2, the Warehouse, is situated directly east of Building 1. It is also a single-story building with a rectangular plan, side-gable roof, and corrugated metal cladding throughout. Fenestration consists of 6/3 steel frame awning windows, two of which are covered by a metal awning. Entrances are located on the south and east elevations and are set with double-sliding metal doors. A double-straight concrete staircase leads to the entrance on the south elevation. It also has rounded metal rails. Stone planter boxes adorn the south elevation.

East of Building 2 is Building 3, the Kitchen/Dining Room. The building is basically rectangular in plan with an addition on the west and north elevations. It features a side-gable roof clad in corrugated metal siding, horizontal wood siding, and T-111 siding. Windows are aluminum sliders. Entrances are set with a combination of single-entry and double-entry doors made of wood or steel depending on the entrance. Concrete stairs lead to the entrances on the east and south elevations. A concrete patio and ramp are located on the north elevation.

Building 4, the Barracks/Dorms, is situated in the northeastern portion of the complex. It is a complex plan with three gable-roof wings projecting from the north elevation. The center wing is original and the other two were added in the early 1970s. The building is sheathed in various siding that includes horizontal and vertical wood and T-111. Windows are replacement aluminum sliders. Entrances are set with single entry steel doors that are accessed by concrete stairs.

The Theater/Recreation Hall, Building 5, is located south of Building 4. It is rectangular in plan with a concrete slab foundation and side-gable roof clad in corrugated metal. The building is sheathed in horizontal wood siding and windows are replacement aluminum sliders. Entrances are set with paneled single-entry doors. An awning shelters one entrance. On the building's north elevation is a wood deck that runs almost the full length of the building. A concrete ramp is located on the west elevation that is flanked by a metal open railing.

Building 6 is the Office and Crew Leader House. It is situated west of Building 5. The building sits on a concrete slab foundation and has an L-plan. The building is topped with a gable roof that is clad in corrugated metal. Windows are replacement aluminum sliders and the siding is horizontal wood. Gable roofs shelter some of the entrances which are set with single-entry doors that are either flush or feature glazing and some double-doors. Concrete stairs are also

[3] Photographs of all of the evaluated buildings are presented in Appendix C.

present at some of the entrances. On the south elevation is a full-width concrete porch. There are flagstone planters around the building.

The Administration Building is Building 7 and it sits northwest of Building 6. The building has a T-plan with a cross-gable roof that is clad in corrugated metal and features some skylights. The building is sheathed in horizontal wood siding and features aluminum sliding windows. Entrances are set with single-entry glazed doors that have shed and gable awnings above. Concrete stairs lead to the entrance on the west elevation.

The eighth building, the Auto Shop/Welding Building (Building 8), is situated to the west of Building 6. It is topped with a gable roof that is clad in corrugated metal, as is the entire building. Fenestration consists of 6/3 steel-frame awning windows. Entrances include glazed metal single-entry doors, sliding corrugated metal doors, and a replacement roll-up door. An awning shelters one of the entrances on the north elevation and a shed roof addition is located on the south elevation. A ramada, a second addition, was also added to the south elevation as was a single-story addition giving the building an L-plan.

Building 9 is a water tank located upslope and about 750 feet north of the Placer Center building complex. The water tank is a small, single-story building that is rectangular in plan with a shed roof of corrugated metal. The building rests on a concrete slab foundation. It is built into a hillside so that its main (southwest) elevation is shorter than the rear (northeast) elevation. The lower portion of the building (adjacent to the dirt road that runs to its southwest) is constructed of concrete, while the rear is clad in horizontal wood boards. There is an entryway centered on the southwest elevation that is sheltered by the roof. There is a secondary entryway fitted with a wood door at the center of the rear (northeast) elevation. The northeast elevation also has a large box for services which is topped with an antenna installed on its wall. There is an exterior concrete staircase at the southeast elevation. Its lower flight leads toward the building along a concrete retaining wall, and terminates in a landing adjacent to the building. A longer upper flight leads alongside the building to the hilltop. Overall, it appears that the building has undergone alterations over the years, particularly at the rear.

The Placer Center does not appear to meet NRHP/CRHR Criterion A/1 because it has no direct association with significant events or trends in history. Construction of this facility began in about 1948 during a period when the CAL FIRE was already an established agency with many such facilities located throughout California. Research does not support that this particular facility played an important role in the history of CAL FIRE or their work. There is also no significance for its association with the CCC. Because the property served as a CAL FIRE facility for approximately 30 years before becoming jointly operated with the CCC, it is associated with many different individuals. Research, however, did not reveal that these individuals made significant contributions to history that would qualify the property under NRHP/CRHR Criterion B/2. Therefore, it does not appear to meet this criterion. Architecturally, the property lacks architectural distinction as individual buildings and as a potential district. The buildings are all modest examples of their type and do not have a discernable architectural style. Rather they are common examples of buildings constructed more for function than aesthetics. Research also did not reveal that the buildings were designed by a master architect. For these reasons, the property does not appear to meet NRHP/CRHR Criterion C/3. Under NRHP/CRHR Criterion D/4, the property does not appear

likely to yield information important to history because it is not the principal source of important information.

In addition to lacking historical and architectural significance, the property has lost integrity. The design of the property was altered when additions were made to Buildings 3, 4, and 8. These additions enlarged the buildings and altered the massing of these buildings. The additions to these buildings also altered integrity of materials with the introduction of non-historic fabric. The integrity of workmanship was altered when the buildings received additions and replacement windows.

The property does not appear to meet the criteria for a Landmark. It is not the first, last, or most significant property of its type. In fact, there were many CAL FIRE facilities like this one throughout California. The property is not associated with individuals that had a profound influence on the history of California. Nor is the property's association with CAL FIRE significant enough to meet this Landmark designation criterion. Finally, the property is not a prototype of, or an outstanding example of a period, style, architectural movement or construction for the same reasons as noted above for NRHP/CRHR Criterion C/3. It is also not a notable work or the best surviving work of a pioneer architect, designer, or master builder.

Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in (1) documenting the presence and evolutionary history of particular groups of now-extinct organisms; (2) reconstructing the environments in which these organisms lived; and (3) determining the relative ages of the strata in which they occur, as well as the relative ages of the geologic events that resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.

The methodology applied to the evaluation of potential project impacts on paleontological resources involved two elements: first, to evaluate the potential for unique paleontological resources to exist within the project site, and then to evaluate the impacts that construction of the Proposed Project could have on those resources.

A search of known paleontological sites in California (UCMP 2016) did not identify any known sites within the project site. Research also indicated that the geology in the vicinity of the project site consists of Cretaceous-age granitic rock, and field observations confirm that the granite is quite close to the ground surface. Geotechnical studies of the site indicate that native soils were less than 3.5 feet deep and are underlain by decomposing granite (Geocon Consultants, Inc. 2016). Such soils, derived from granite, are not conducive to the preservation of fossils.

3.5.3 Discussion of Checklist Responses

a. Adverse change in the significance of a historical resource— *No Impact*

No historical resources, as defined in Section 15064.5 of the CEQA Guidelines, were identified within the project site. As a result, the Proposed Project would not cause a substantial adverse change to a historical resource and there would be **no impact**.

Historical resources that are archaeological in nature may be accidentally discovered during project construction; archaeological resources are discussed further in item 3.5(b) below.

b. Adverse change in the significance of an archaeological resource—*Less than Significant with Mitigation*

No archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, were identified within the APE. Although an archaeological survey was conducted and no archaeological resources were identified, archaeological remains may be buried with no surface manifestation. The observation by CCC staff of historic-era materials in the roots of a fallen oak, and the discovery of a wall during waterline installation attests to the potential for buried archaeological resources at the project site. Furthermore, because the project site was reported as the location of site P-31-246/H (CA-PLA-120), there is a heightened potential for buried remains of a Native American village.

Although the new facilities of the Placer Center will be entirely constructed in areas that have previously been disturbed by construction of the existing facilities (see Figures 2-2 and 2-3), it is possible that some new elements will require excavations or placement below currently disturbed levels and encounter undisturbed ground. It is estimated that demolition and site preparation would extend to depths of approximately 5 feet below ground surface (bgs) in areas where buildings and structures are to be located. New utility trenches are anticipated to vary between 3 and 5 feet wide and a maximum potential depth of 5 feet. Such excavation activities could uncover buried archaeological materials, in both disturbed and undisturbed contexts. Prehistoric materials most likely would include obsidian and chert flaked-stone tools (e.g., projectile points, knives, and choppers), tool-making debris (stone flakes or chips), or stone milling equipment such as mortars and pestles. Buried historic-era artifacts associated with the town of Hotaling, ranching, or mining activities, might include: structure remains such as cut (square) or wire nails, window pane glass fragments, iron hinges for windows or doors, or iron water pipes; domestic remains such as tin cans, glass fragments, ceramic debris, metal utensils (cutlery, plates, cups, pots, pans), or clothing remains (i.e., buttons, leather shoe/boot fragments); ranching-related items, including barbed or round wire, horseshoes, and hand tools such as hoes or shovels; and materials related to iron mining, such as machine parts, picks, or iron slag.

If archaeological remains are accidentally discovered that are determined eligible for listing in the CRHR or as a unique archaeological resource, or determined to be a TRC, and Proposed Project activities would affect them in a way that would render them ineligible for such listing, a significant impact would result. Should previously undiscovered archaeological resources be found, implementation of **Mitigation Measures CR-1 and CR-2** would ensure that impacts on CRHR-eligible archaeological sites accidentally uncovered during

construction would be reduced to a less-than-significant level. The presence of qualified archaeological monitors on site during ground disturbance activities would ensure that work would immediately halt if buried cultural materials are discovered. This would be followed by evaluating the finds for CRHR eligibility, and implementing appropriate mitigation measures, as necessary. Therefore, this impact would be **less than significant with mitigation**.

Mitigation Measure CR-1: Conduct archaeological sensitivity training and construction monitoring.

Prior to initiation of ground-disturbing activities, the State shall arrange for construction crews to receive training about the kinds of archaeological materials that could be present within the project site and the protocols to be followed should any such materials be uncovered during construction. Training will be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards. Training may be required during different phases of construction to educate new construction personnel.

A qualified archaeological monitor will be retained to monitor all ground disturbing activities associated with the project, from demolition through the installation of building foundations, utility trenching, and grading. A Native American monitor may be present during ground disturbing activities, at the discretion of the UAIC. If any prehistoric or historic-era features, or human remains, are exposed during construction, the archaeological monitor will have the authority to stop work in the vicinity of the finds and implement the Unanticipated Discoveries Plan and other actions identified in **Mitigation Measure CR-2**.

Mitigation Measure CR-2: Develop an Unanticipated Discoveries Plan, immediately halt construction if cultural resources are discovered, evaluate all Identified cultural resources for eligibility for inclusion in the CRHR, and implement appropriate mitigation measures for eligible resources.

An Unanticipated Discoveries Plan will be developed by the State prior to initiating construction. The Unanticipated Discoveries Plan will outline protocols to be followed should there be unanticipated archaeological finds, provide for points of contact and present a timeline for notifications. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work will be suspended immediately at the location of the find and within a radius of at least 50 feet, and the lead agency will be contacted. The discovered items will be recorded with photography, measurements, and GPS data, as appropriate.

All cultural resources accidentally uncovered during construction within the project site will be evaluated for eligibility for inclusion in the CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in Public Resources Code Section 5024.1 or CEQA Section 21083.2(g), mitigation measures will

be developed and implemented in accordance with CEQA Guidelines Section 15126.4(b) before construction resumes.

For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources will be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation will be required if an archaeological site is determined to be a TCR. Implementation of the approved mitigation will be required before resuming any construction activities with potential to affect identified historical resources at the site.

c. Destruction of a unique paleontological resource or site or unique geological feature— *Less than Significant with Mitigation*

No paleontological resources were identified within the project site. As with archaeological remains, paleontological resources may be buried with no surface manifestation. The accidental discovery of significant paleontological resources that could be destroyed as a result of construction of the Proposed Project would be considered a significant impact. Should previously undiscovered paleontological resources be found, implementation of **Mitigation Measure CR-3** would reduce impacts to a less-than-significant level by immediately halting work if materials are discovered, evaluating the significance of the find, and implementing appropriate mitigation measures, as necessary. Therefore, this impact would be **less than significant with mitigation**.

<u>Mitigation Measure CR-3:</u> Immediately Halt Construction if Paleontological Resources are Discovered, Evaluate the Significance of the Resources, and Implement Appropriate Mitigation Measures as Necessary.

Paleontological resources are not necessarily visible on the ground surface. As a result, prior to initiation of ground-disturbing activities, construction crews will receive training about the kinds of paleontological materials that could be present within the project site and the protocols to be followed should any such materials be uncovered during construction. Training will be conducted by a professional paleontologist. Training may be required during different phases of construction to educate new construction personnel.

If any items of paleontological interest are accidentally discovered during construction, work will be immediately suspended within 50 feet of the discovery site and the lead agency will be contacted.

Any accidental discovery of paleontological resources during construction will be evaluated by the qualified paleontologist. If it is determined that the Proposed Project could damage a unique paleontological resource, as defined in the CEQA Guidelines, mitigation will be implemented in accordance with CEQA Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist will

develop a treatment plan in consultation with the lead agency. Work will not be resumed until authorization is received from the lead agency and any recommendations received from the qualified paleontologist are implemented.

d. Disturbance of any human remains, including those interred outside of formal cemeteries—*Less than Significant with Mitigation*

No evidence of human remains was observed within the project site. Human remains are not known to exist in or near the project site; however human remains may be buried with no surface manifestation. Excavations associated with construction, particularly trenching, have the potential to uncover such remains, if they are present. Impacts on accidentally discovered human remains would be considered a significant impact. Implementation of **Mitigation Measure CR-4** would ensure that the Proposed Project would not result in any substantial adverse effects on human remains uncovered during the course of construction by requiring that, if human remains are uncovered, work must be halted and the County Coroner must be contacted in adherence to the provisions of the California Health and Safety Code. Therefore, this impact would be **less than significant with mitigation**.

<u>Mitigation Measure CR-4:</u> Immediately halt construction if human remains are discovered and implement applicable provisions of the California Health and Safety Code.

If human remains are accidentally discovered during the project's construction activities, the requirements of California Health and Human Safety Code Section 7050.5 will be followed. Potentially damaging excavation activities will halt in the area of the remains, with a minimum radius of 100 feet, and the County Coroner will be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Pursuant to the provisions of Public Resources Code Section 5097.98, the NAHC will identify a Most Likely Descendent (MLD). The MLD designated by the NAHC will have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The project proponent will work with the MLD to ensure that the remains are removed to a protected location and treated with dignity.

e. Adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074— *No Impact*

No TCRs, as defined in Public Resources Code § 21074, were have been identified within the project site through consultation with Native American tribes, to date. As a result, the Proposed Project currently would not cause a substantial adverse change to a TCR and there would be **no impact**. Consultations with Native American tribes under PRC 21080.3.1 are on-going; therefore, this impact analysis may be subject to change.

3.6 Geology, Soils, and Seismicity

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Expose people or structures to 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 an on-site 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 risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

3.6.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies related to geology, soils, and seismicity are applicable to the Proposed Project.

State Laws, Regulations, and Policies

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist-Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690-2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Under the Seismic Hazards Mapping Act, the state is responsible for identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. The CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains a number of goals and policies related to soil conservation, minimization of soil loss due to erosion, and minimization of impacts resulting from geologic hazards. The Placer County General Plan (2013) is largely consistent with the Auburn/Bowman Community Plan and contains similar goals and policies related to soil conservation and seismic and geologic hazards. Placer County also has a grading ordinance; Chapter 15 of the County Code specifies the conditions/requirements for grading within the unincorporated areas of Placer County. Among other things, the grading ordinance generally prohibits grading in such a manner that would cause substantial erosion or would obstruct the natural flow of stormwater. A grading permit is required from the County for any grading and/or other construction activity with ground disturbance of one acre or more.

3.6.2 Environmental Setting

Geology

As described in the Project's geotechnical report (Geocon Consultants, Inc. 2016), the project site is located along the western edge of the Sierra Nevada geomorphic province of California. The Sierra Nevada geomorphic province is typified by a belt of northwest-trending metamorphic, volcanic, and igneous rocks that have been sheared, deformed, and intruded during periods of tectonic and volcanic activity (Geocon Consultants, Inc. 2016). Published geologic maps show the project site as underlain by Cretaceous-age granitic rock (Geocon Consultants, Inc. 2016), and the conditions encountered in test pits and borings during the geotechnical investigation were generally consistent with this designation. In general, the geotechnical report observed fill material and residual soil overlying variably weathered fine- to medium-grained granitic rock (Geocon Consultants, Inc. 2016).

Soils

The majority of the project site is mapped by the National Resources Conservation Service (NRCS) as overlying Boomer variant very stony sandy loam (NRCS 2015). Pockets of Boomer variant stony sandy loam also exist in the project area, generally to the east and northwest of the immediate project site. NRCS defines the Boomer variant soil complex as characteristic of ridges, with a parent material of residuum weathered from syenite (NRCS 2015). The soils of this variant are typically well drained with very high runoff potential. The capacity of the most limiting layer to transmit water is very low to moderately low (NRCS 2015).

The findings of the Project's geotechnical report were generally consistent with NRCS mapping/classification, as the geotechnical investigation generally found: (1) fill material consisting predominantly of loose to medium-dense silty sand with varied but generally minor proportions of clay and/or gravel, and (2) residual soil generally consisting of loose to dense, brown, reddish-brown, or strong brown silty sand with few roots (Geocon Consulting, Inc. 2016). Notable exceptions included a layer of stiff to very stiff lean clay and sandy silt observed in the area of the former wastewater treatment ponds, hypothesized to be relic pond bottom/liner material.

Seismicity

Faults

The project site is not mapped as being within an Alquist-Priolo Earthquake Fault Zone (Geocon Consulting, Inc. 2016); however, there are several known faults in proximity to the project site. Table GEO-1 shows known faults in proximity to the project site, identified through the California Geological Survey's (CGS) online mapping system.

Table GEO-1. Faults in Proximity to the Proposed Project

Fault	Approximate Distance from Proposed Project	Last Known Major Displacement
Highway 49 Fault	2 miles west	Late Quaternary (during past 700,000 years)
Dewitt Fault	4 miles west/southwest	Late Quaternary (during past 700,000 years)
Deadman Fault	5 miles west/southwest	Late Quaternary (during past 700,000 years)
Maidu East Fault	6.7 miles south	Quaternary (age undifferentiated)
Spenceville Fault	7.3 miles west	Late Quaternary (during past 700,000 years)
Giant Gap Fault	9.3 miles northeast	Quaternary (age undifferentiated)
Swain Ravine Fault	9.7 miles northwest	Quaternary (age undifferentiated)
Rescue Fault	11 miles south/southeast	Late Quaternary (during past 700,000 years)

Source: CGS 2010

In addition to the faults shown in Table GEO-1, a number of pre-quaternary faults, which are older than 1.6 million years or without recognized Quaternary displacement, were delineated on the CGS system in relative proximity to the project site (CGS 2010).

Ground Shaking

According to the CDC, the project site is in an area of low hazard with respect to potential ground shaking during an earthquake (CDC 2003).

Ground Failure, Liquefaction, Lateral Spreading, and Subsidence

Liquefaction is a phenomenon in which a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress, such as seismic ground shaking, causing it to behave like a liquid. Primary factors that trigger liquefaction are: moderate to strong ground shaking; relatively clean, loose granular soils, and saturated soil conditions (shallow groundwater). As described in the Project geotechnical report, the project site is not located in a currently established State of California Seismic Hazard Zone for liquefaction and there are no evident reported historical instances of liquefaction in the area (Geocon Consultants, Inc. 2016).

Landslide and Slope Failure

The project site is relatively flat to moderately sloped, but there is a hill to the north of the site with steeper slopes. According to the Project's geotechnical report, the natural and cut/fill slopes on and adjacent to the site appear to be performing well without evidence of global instability (Geocon Consultants, Inc. 2016). The geotechnical consultants observed

inclinations primarily on the order of 2H:1V and flatter on the steeper northern portion of the CCC property (Geocon Consultants, Inc. 2016).

3.6.3 Discussion of Checklist Responses

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Seismic-related rupture of a known earthquake fault—*Less than Significant*

As described in the Environmental Setting above, the project site is not located in a defined Alquist-Priolo Fault Zone. There are a number of known faults in the Project vicinity, as shown in Table GEO-1, but none of these faults have experienced recent displacements such that they would be considered active. The nearest fault to the project site is the Highway 49 fault, which is located approximately 2 miles to the west. The last known displacement of this fault was during the late quaternary period, or during the past 700,000 years. As such, displacement of this fault during the anticipated life span of the Project facilities would be unlikely. Seismic-related rupture of this fault or any of the other known faults in the Project vicinity shown in Table GEO-1 could potentially expose people and structures at the project site to adverse effects, but given the age and inactivity of these faults, such an occurrence is unlikely. Additionally, given that the Proposed Project would replace existing CCC facilities on the project site, and the new structures would be built with modern materials and to modern standards, the Proposed Project would likely decrease potential impacts during seismic-related rupture of an earthquake fault compared to existing conditions. This impact would be **less than significant.**

ii. Strong seismic ground shaking—*Less than Significant*

The project site is not in an area of high hazard with respect to ground shaking during an earthquake, as mapped by the CDC. Strong seismic ground shaking could potentially expose people and structures associated with the Proposed Project to substantial adverse effects, but such an occurrence would be unlikely. Additionally, the Project facilities would be designed and constructed in accordance with Title 24 of the CBC for seismic performance and safety, and would represent an improvement over the existing facilities with regard to anticipated seismic performance. Therefore, this impact would be **less than significant.**

iii. Seismic-related ground failure, including liquefaction and landslides—*Less than Significant*

As described in the Environmental Setting above, and in the Project geotechnical report, the project site is not located in a currently established State of California Seismic Hazard Zone for liquefaction and there are no reported historical instances of liquefaction in the area. The natural and cut/fill slopes on and adjacent to the project site appear to be performing well with no signs of large-scale instability (Geocon Consultants, Inc. 2016). Groundwater may be very shallow (i.e., less than 2 feet bgs) on portions of the project site (particularly the southern portion), depending on the time of year and other factors, but this characteristic alone would not be anticipated to substantially increase the likelihood of liquefaction or

landslides. Overall, the likelihood of seismic-related ground failure on the project site would be considered low. This impact would be **less than significant.**

iv. Landslides—*Less than Significant*

See discussion of 3.6.3(a)(iii), above.

b. Substantial soil erosion or the loss of topsoil—*Less than Significant with Mitigation*

Construction of the Proposed Project would include ground-disturbing activities (e.g., clearing and grubbing for site preparation, grading, excavation for building foundations), which could potentially cause erosion and/or the loss of topsoil. Ground-disturbing activities can loosen or expose soils allowing them to be transported by water or wind or otherwise more easily erode. Excavation and removal of material for building construction can also result in the permanent loss of topsoil from the area. While construction of the Proposed Project would have the potential to cause erosion or result in the loss of topsoil, implementation of practices to prevent these effects during construction would substantially reduce their likelihood and potential magnitude. **Mitigation Measure GEO-1** would require implementation of best management practices (BMPs) for erosion control. Additionally, as described in Chapter 2, *Project Description*, the Proposed Project would reuse excavated material on-site to the extent feasible. With implementation of these measures, the Proposed Project's potential to result in substantial erosion or loss of topsoil would be less than significant.

<u>Mitigation Measure GEO-1</u>: Implement Best Management Practices for Erosion Control

The State and/or its contractor(s) will implement site-specific BMPs during construction activities, which may include but would not be limited to:

- Practices to reduce erosion of exposed soil, including stabilization of soil stockpiles, watering for dust control, establishment of perimeter silt fences, and/or placement of fiber rolls;
- Minimization of soil disturbance area;
- Limitation of construction to dry periods to the extent feasible;
- Revegetation of disturbed areas.

c. Location on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse—*Less than Significant with Mitigation*

While the project site in general is not considered susceptible to ground failure, as described in Checklist Question (a)(iii) above, a geotechnical report for the Proposed Project identified

areas of fill on the site that could become unstable if buildings were constructed on them. In general, fill material is considered unsuitable to support building foundations due to its relative instability and lack of sheer strength. The geotechnical report identified up to 10 feet of existing fill at several locations on the project site, including in the area of the proposed multipurpose building. Placement of Project components on this existing fill material could potentially result in building collapse, subsidence, or other geologic hazards. As such, in accordance with the recommendations in the Project geotechnical report, the Proposed Project will implement **Mitigation Measure GEO-2**, to require removal, testing, and re-compaction of existing fill material under proposed new building pads during site grading. This mitigation measure would be anticipated to reduce the potential for geologic hazards to a level of **less than significant**.

Mitigation Measure GEO-2: Remove and Re-compact Existing Fill Material under Proposed Building Pads During Site Grading

During site grading, the construction contractor(s) shall remove existing fill material below proposed building pads to a depth where soil of adequate compaction for engineering/building stability is reached based on the results of the Project's geotechnical report and any supplemental data. If determined to be suitable for reuse, removed fill material shall be re-conditioned/re-compacted to design specifications.

d. Location on expansive soil, creating substantial risks to life or property—*Less than Significant*

Laboratory testing for the soils at the project site indicated a low plasticity index and very low expansion potential, as described in the Project geotechnical report (Geocon Consultants, Inc. 2016). Therefore, the potential for the Proposed Project to create substantial risks to life and property associated with a location on expansive soil would be less than significant.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater—*No Impact*

The Proposed Project would not require or include use of a septic tank or alternative wastewater disposal system. The project site has ready access to sewer facilities and wastewater generated by the Project facilities would be sent to the local treatment facility.

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with a county-adopted climate action plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.7.1 Regulatory Setting

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce greenhouse gas (GHG) emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

In recent years, California has enacted a number of 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. 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 GHG emission reduction 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 to 33 percent by 2020.

The CBC, Title 24, governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect GHG emissions associated with buildings. Green building EOs S-20-04 and B-18-12 outline guiding policies for reducing electricity consumption in existing and new State-owned buildings through "LEED Silver" or higher certified buildings, and requiring state agencies to

reduce entity-wide GHG emissions by 20 percent by 2020, in addition to implementing other energy saving requirements.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2014). This update defines climate change priorities for the next five years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

In April 2015, Governor Brown issued EO B-30-15 which established a GHG reduction target of 40 percent below 1990 levels by 2030. This is a target between previously established targets of achieving 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The executive order also directs the state to incorporate climate change impacts in the Five-Year Infrastructure Plan, updating the state's climate adaptation strategy, and implement measures under existing agency and departmental authority to reduce GHG emissions.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) does not contain any goals or policies specifically related to greenhouse gas emissions or climate change; however, the Plan includes goals and policies related to water conservation, which could indirectly serve to reduce greenhouse gas emissions. Like the Auburn/Bowman Community Plan, the Placer County General Plan (2013) has no mention of greenhouse gas emissions or climate change, but does have goals and policies for energy and water conservation/efficiency, which could indirectly serve to reduce greenhouse gas emissions.

PCAPCD Thresholds

Although the PCAPCD did not establish thresholds of significance for construction and operational-related GHG emissions in its CEQA Guidelines handbook, the PCAPCD actively participated in the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) thresholds of significance development process and suggests that SMAQMD's thresholds or other air district-adopted thresholds can be considered for use in their region (PCAPCD 2013). The SMAQMD's brightline significance threshold of 1,100 metric tons of carbon dioxide equivalents ($MTCO_2e$) for construction- and operation-related GHG emissions was selected by CCC as an appropriate significance threshold for this project.

3.7.2 Environmental Setting

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [CO_2], CH_4, and NO_2) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. 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.

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

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.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2013, total California GHG emissions were 459.3 million $MTCO_2e$ (CARB 2015b). This represents a reduction in total GHG emissions from 2012, which had the first emissions increase since 2007. The 2012 increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower generation. Although GHG emissions reached a peak in 2004, overall GHG emissions have decreased by 2.0 percent since 2000.

In 2013, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 37 percent of the total emissions. On-road vehicles accounted for more than 90 percent of emissions in the transportation sector. The industrial sector accounted for approximately 20 percent of the total emissions, and emissions from electricity generation were about 20 percent of the total. The rest of the emissions are made up of various sources (CARB 2015b).

3.7.3 Discussion of Checklist Responses

a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment—*Less than Significant*

The Proposed Project would generate GHG emissions during construction and operation. Construction-related GHG emissions would result from the combustion of fossil-fueled construction equipment, material hauling, and worker trips. These emissions were estimated using the CalEEMod version 2013.2.2, with default assumptions for 3.5 acres of site development. The Proposed Project's total construction-related GHG emissions are estimated at 477 $MTCO_2e$ (Appendix A).

Operational GHG emissions would result from fossil-fueled equipment, building energy use, water use, and solid waste. The Proposed Project's operational emissions were generally estimated with CalEEMod version 2013.2.2 using default assumptions, except for mobile emissions, renewable energy use, and off-road equipment as further detailed. The operational GHG emission estimate does not include mobile (vehicle) emissions associated with the Proposed Project's operation because the Proposed Project would not alter the quantity of CCC staff and corpsmembers at the Placer Center from its existing operations, and would not alter vehicle trip distances or frequencies by the CCC personnel. The other building operational emissions were conservatively included although they would be anticipated to be the same or lower than the previous buildings due to newer building codes. The Proposed Project's solar panel array was assumed to contribute 50 kilowatts (kW) of renewable energy to the project and is estimated to produce 79,854 kilowatt hours (kWh) per year. The diesel-powered pump for the water tank was assumed to have 84 hp and operate for 260 hours per year for testing, and/or irrigation of the CCC parcel. The emergency generator was assumed to be 450 hp and operate for 1 hour 20 days a year. Renewable energy associated with the Proposed Project's solar hot water heating panels on the roof of the kitchen/dining hall/multipurpose facility and the dormitory building would reduce the emissions from natural gas, but they were not quantified. Based on these assumptions, the Proposed Project's operational GHG emissions are estimated to be 203 $MTCO_2e$ per year. The new facility would be constructed consistent with current California building codes, which substantially reduce the energy and water use for new buildings compared to the standards in effect when the existing CCC Placer Center's dormitory and kitchen buildings were constructed.

While the PCAPCD does not have an established threshold for GHG emissions, several air districts in California have proposed "bright line" thresholds for projects, under which they are not anticipated to result in a significant impact to global climate change or impede the goals of AB 32. In addition to the SMAQMD's threshold previously described, the Bay Area Air Quality Management District and the San Luis Obispo County Air Pollution Control District have adopted thresholds of 1,100 $MTCO_2e$ and 1,150 $MTCO_2e$, respectively (San Luis Obispo County Air Pollution Control District 2012). The SMAQMD threshold was developed with the goal of complying with AB 32, and based upon a review of the California Air Pollution Control Officers Association's (CAPCOA's) guidance for threshold development and other agency's significance thresholds. In addition, the SMAQMD evaluated representative projects in the Sacramento Valley air basin, including projects in the PCAPCD's region. As detailed in SMAQMD's "*Justification for Greenhouse Gas Emissions Thresholds of Significance*" document (SMAQMD 2014), implementation of CAPCOA's guidance on threshold development would ensure compliance with AB 32 by setting a threshold at a level such that 90 percent of proposed projects would be reviewed to assess the need for additional GHG reduction mitigation measures. The SMAQMD's threshold of 1,100 $MTCO_2e$ was determined to require the review of over 95 percent of proposed land development projects, which complies with CAPCOA's guidance (of 90 percent project review) and AB 32's GHG reduction goals. Therefore, since the Proposed Project's emissions would be well below such significance thresholds, the impact would be **less than significant**.

b. Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases—*Less than Significant*

The State of California has implemented AB 32 to reduce GHG emissions. The Proposed Project does not pose any conflict with the most recent list of CARB's early action strategies, and would be compliant with the Green Building sector, which is one of the sectors at which the measures are targeted. The First Update to the AB 32 Scoping Plan mentions achieving executive order goals for state buildings as a specific target to reduce GHG emissions. The Proposed Project would comply with these green building sector targets by being an "LEED Silver" certified building, incorporating renewable energy for water heating and other electrical needs, minimizing demolition and construction waste, and implementing other energy-reducing measures with consideration of other AB 32 target sectors such as natural resources, transportation, and land use. The Proposed Project would not be required to report emissions to CARB. Therefore, emissions generated by the Proposed Project would not be expected to have a substantial contribution to the ongoing impact on global climate change. The location of the project site is in line with local general plan policies regarding energy and water conservation/efficiency planning goals. For these reasons and those detailed in Impact 3.7.3(a) above, the Proposed Project would not conflict with AB 32 and the local general plans. Therefore, this impact would be **less than significant.**

3.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☒	☐	☐
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport and result in a safety hazard for people residing or working in the study area?	☐	☐	☐	☒
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the study area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

3.8.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, the USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program in California, in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also sets standards for safety related to blasting and storage of explosive materials.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public about exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. The California Environmental Protection Agency (CalEPA) and other state agencies set the standards for their programs while local agencies (i.e., Certified Unified Program Agencies [CUPAs]) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of underground storage tanks (USTs) and aboveground storage tanks (ASTs);
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

The designated CUPA for Placer County is the Placer County Environmental Health Department.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES 2016). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to

maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers also must make material safety data sheets available to employees and document employee information and training programs.

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or trade secret.

CAL FIRE Wildland Fire Management

The Office of the State Fire Marshal and the CAL FIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) is consistent with, and incorporates by reference, the Health and Safety Element of the Placer County General Plan (2013). The Health and Safety Element contains goals and policies to minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social disruptions resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous

materials wastes. Health and Safety Element policies include strict regulation of hazardous materials and waste storage, and required secondary containment for storage of hazardous materials. Placer County also requires a blasting permit for use of explosives within the County.

3.8.2 Environmental Setting

Site Characteristics and Historical Uses

As described in Chapter 2, *Project Description,* the project site, and greater CCC property, is currently used to support CCC's programs and operations. Existing CCC structures/features on the CCC property/ project site include office buildings, a dining hall and kitchen, men's and women's dormitories, warehouses, a handball court, a gravel parking area, and a former leach field. The leach field, which included sewage treatment ponds, was filled and restored to a relatively flat grass-covered ground surface in 2010.

Historical uses of the CCC property and facilities include fire training- and conservation-related activities. The property remained undeveloped until the late 1940s (URS 2015b). By 1952, the property was developed with many of the facilities/structures (e.g., kitchen/dining hall, dormitories, administrative buildings) that exist today. Between 1951 and the 1970s, the CCC property/facility was used as a fire training camp for inmates by the Department of Forestry and Corrections (URS 2015b). Following that, between 1977 and 1984, the facility was used by the Ecology Corp for public service/conservation services and fire response. In 1984, the facility combined with the Energy Center, a special state program that performed energy audits of government centers, electrical retrofits, weatherization and solar programs (URS 2015b).

The nearest sensitive receptors to the project site include the Placer Nature Center, approximately 240 feet to the north, and residential homes, approximately 450 and 525 feet to southwest and west, respectively. The nearest school (Forest Lake Christian School) is approximately 2.25 miles north-northeast of the project site, though there is a daycare facility approximately 0.5 miles south of the site.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (Phase I ESA) was conducted for the project site, which identified three recognized environmental conditions (RECs) associated with the project site, as follows (URS 2015b):

- The greater CCC site was listed in the GeoTracker database (SWRCB 2016) for an unauthorized release from an UST in 1989. Subsequent investigations revealed that petroleum hydrocarbons and fuel additives were present in the subsurface at concentrations exceeding regulatory maximum contaminant levels (MCLs). The Central Valley Regional Water Quality Control Board (RWQCB) concluded that subsurface impacts were limited in extent and that petroleum hydrocarbons would naturally attenuate within a reasonable time frame. Based on these factors, as of May 14, 2015, the site is eligible for closure under the Low-Threat Closure Policy. A 60-day public comment period ended on April 19, 2015. On November 30, 2015, the

Central Valley RWQCB issued a letter requesting the site wells be decommissioned to complete the closure process. Though the former UST(s) were located within the CCC parcel and not the within the project site specifically, low levels of residual contamination originating from the former UST area may have impacted the subsurface beneath the project site. However, based on the pending closure regulatory status, the residual contamination is not expected to pose a significant environmental risk in connection to the subject property.

- Four tertiary ponds were removed from the greater CCC facility/parcel during the water and sewer upgrades in 2010. The ponds contained domestic wastewater that was pumped from a former onsite septic tank. The septic tank was abandoned by backfilling with concrete. A new septic tank was installed near the gate entrance and is maintained by Placer County. Because sewage ponds are often contaminated with heavy metals and biological agents, the former tertiary ponds are considered a REC in connection to the subject property.

- Asbestos, lead paint, universal wastes and other suspect hazardous wastes were found in Geocon Consultants, Inc.'s 2013 *Asbestos, Lead-Containing Paint, Universal Waste, and Mold Survey Report*. The Geocon report identified asbestos throughout the buildings and structures on the CCC property, as well as lead in deteriorated and intact paints (URS 2015b). Universal wastes identified at the site included florescent light fixtures, household chemicals (paints, fuels, solvents, cleansers, etc.), automotive batteries, 14 "exit" signs, and 19 heating, ventilation, and air conditioning units.

The Phase I ESA also noted that a 2011 Hazardous Materials Business Plan filed with the Placer County Environmental Health Department indicates that the CCC property contains one shared AST containing 1,500 gallons of gasoline and 500 gallons of diesel and numerous 55-gallon drums of chainsaw bar oil (URS 2015b).

Sediment Investigation Report

The CCC prepared a sediment investigation report, dated September 2009, for the portion of the Placer Center property containing the former wastewater treatment ponds (Central Valley RWQCB 2009). The report was to support their request from the Central Valley Regional Water Quality Control Board to allow closure of the ponds by the method of backfilling with soil and leaving in place. The sediment report found that sediment samples were comparable in composition to background soil samples and therefore were not a threat to groundwater quality. However, the Central Valley RWQCB was concerned that because the background soil sampling locations were adjacent to pond berms, the soil samples might not represent true background conditions. To address these concerns, the CCC prepared an addendum to the sediment investigation report, dated January 2009, which provided additional background soil data using sampling locations beyond the potential influence of the ponds.

The addendum found that the additional background samples contained metal concentrations either equivalent or greater than previous background sampling but still within typical background levels. In addition, the addendum showed that sediment metal concentrations in the area of the former wastewater treatment ponds were considerably less than 40 CFR biosolid land application limits and Office of Environmental Health Hazard

Assessment (OEHHA) Human-Exposure-Based Screening Numbers (Central Valley RWQCB 2009). The highest metal concentration observed in the pond sediment samples relative to its OEHHA Screening Number was lead, which was observed at 4.6 mg/kg, or approximately 4% of its OEHHA Screening Number of 150 mg/kg. In total, of the 11 metals tested for in the pond sediment samples, 4 (arsenic, beryllium, molybdenum, and nickel) were not detected and the other 7 (barium, cobalt, chromium, copper, lead, vanadium, and zinc) were measured at levels less than or equal to 4% of their respective OEHHA Screening Numbers (CCC 2009). Based on the findings of the Sediment Investigation Report and Addendum, the Central Valley RWQCB staff agreed with CCC's proposed pond closure plan and that sediment did not need to be removed from the site.

Wildland Fire Hazard

CAL FIRE designates the project site as a moderate to high fire hazard severity area (CAL FIRE 2007).

3.8.3 Discussion of Checklist Responses

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials—*Less than Significant with Mitigation*

Construction

Construction of the Proposed Project would involve the transport, use, and disposal of hazardous materials, such as fuel, oil, and lubricant used in construction equipment. These materials could potentially create a hazard to construction workers or the environment if they were to spill or leak during construction activities/storage or if they were to be improperly transported or disposed of.

Hazardous materials also would be anticipated to be encountered during demolition of existing facilities. As described in the Environmental Setting above, the existing facilities on the project site contain asbestos, lead paint, and universal wastes. Removal of these materials during construction, and their transport and disposal following removal, could potentially create a hazard to the public or environment. As described under the Environmental Setting above, the Sediment Investigation Report and subsequent Addendum performed for the area of the former leach field found no evidence of soil contamination. Soil samples taken from the area of the former leach field were comparable to background conditions and metal concentrations were considerably less than 40 CFR biosolid land application limits and OEHHA screening numbers (SWRCB 2009). Therefore, based on the results of the Sediment Investigation Report, it is not anticipated that any contaminated soil associated with the former wastewater treatment ponds would be encountered during project excavation activities such that they could pose a risk to human health or the environment.

The Proposed Project also may require blasting during Project construction to achieve excavation depths should bedrock be encountered during conventional excavation. At this time, it is not known the extent of blasting required for Project construction, but blasting would generally be controlled and follow the process described in Chapter 2, *Project*

Description. Blasting could potentially expose construction workers and/or the public to substantial hazards if explosive materials were stored improperly on-site, transported improperly to/from the site, or if blasting was conducted in an unsafe manner or without adequate safeguards.

As described above in 3.8.1, *Regulatory Setting*, numerous federal, state, and local laws and regulations govern the transport, use, and disposal of hazardous materials, as well as storage and use of explosives. The Proposed Project would be constructed in compliance with regulations pertaining to hazardous waste, including OSHA and Cal/OSHA requirements for worker safety, and DTSC requirements implemented through the Placer County Environmental Health Department (designated CUPA). Such regulations would include requirements for identification and tracking of hazardous wastes from cradle to grave, worker safety training, availability of safety equipment on construction sites, and accident and illness prevention programs. Additionally, as described in Section 3.9, *Hydrology and Water Quality*, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for the Proposed Project for compliance with applicable National Pollutant Discharge Elimination System (NPDES) permits. 29 CFR 1910.109 pertains to OSHA's standards regarding explosives and blasting agents, and specifies requirements for safe storage, transport, and use of explosives. While compliance with these regulations and preparation of a SWPPP would greatly reduce the potential for creation of a hazard to the public or environment from use, transport, or disposal of hazardous and/or materials, there would still be a potentially significant impact related to hazardous material use or handling onsite and, therefore, mitigation measures have been proposed as described below to reduce the significance of these impacts.

To further reduce the potential for improper handling, transport, and disposal of hazardous wastes, the Proposed Project would implement **Mitigation Measure HAZ-1**, to require hazardous material abatement during demolition activities for Project construction be conducted by licensed contractors. Additionally, **Mitigation Measure HAZ-2** would be implemented to further ensure that all blasting-related activities were conducted in such a manner as to minimize the possibility of injuries to any persons in or near the construction site. With implementation of these mitigation measures, the potential for the Proposed Project to create a hazard to the public or environment from use, transport, or disposal of hazardous materials during Project construction would not be anticipated to be substantial. This impact would be **less than significant with mitigation.**

Operation

During Project operation, use of hazardous materials at the Placer Center generally would continue as under existing conditions. The Placer Center currently includes an AST containing gas and diesel fuel, as well as numerous 55-gallon drums of chainsaw bar oil, for which it maintains a Hazardous Materials Business Plan with the County. Replacement of the kitchen and dining room and dormitory facilities for the Proposed Project would not affect existing storage and use of hazardous materials. As described in Chapter 2, *Project Description,* the proposed water tank would require a diesel-powered water pump, which may require an AST for storage of diesel fuel. If an AST is required for the Proposed Project, it would be designed and constructed in compliance with all federal, state, and local laws, and would include secondary containment components in the event the primary containment structure were to rupture or leak. A Hazardous Materials Business Plan also would be prepared, or the Placer

Center's existing Hazardous Materials Business Plan would be updated, which would identify appropriate emergency response measures, among other items. Given compliance with applicable laws and regulations, any impacts from the Project's possible new AST would be anticipated to be **less than significant.**

Mitigation Measure HAZ-1: Conduct Hazardous Materials Abatement by Licensed Contractor(s)

Hazardous materials abatement activities during Project construction will be conducted by a licensed contractor(s). Specifically, removal of all asbestos-containing building materials shall be conducted by a licensed contractor registered with Cal/OSHA. Such asbestos-containing building materials shall be removed prior to demolition and shall be disposed of following federal and state regulations. All paints at the site shall be treated as lead-containing for purposes of determining the applicability of Cal/OSHA lead standards during maintenance, renovation, and demolition activities. Universal wastes or suspected hazardous materials (e.g., florescent light fixtures, household chemicals, automotive batteries, etc.) will be removed, recycled, and/or disposed of at an appropriate waste facility by a contractor(s) licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.

Mitigation Measure HAZ-2: Prepare and Implement a Blasting Plan

If blasting is deemed necessary for the construction of Proposed Project components, the State or its contractors will conduct a pre-blast survey, prepare a blasting plan, and implement the plan throughout the Proposed Project's construction period. A written report of the pre-blast survey and final blasting plan will be provided to the appropriate regulatory agency and approved prior to any rock removal using explosives. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan will meet the following conditions to fully minimize hazard- and noise-related impacts of blasting activities:

- The pre-blast survey will be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by the State. Notification that blasting will occur will be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey will be included in the final blasting plan. Precautions such as fencing or taping will be incorporated that limit access by users of the Placer Nature Center and/or the general public.

- The final blasting plan will address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan will meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement. To support a more detailed noise and vibration analysis of the blasting activities, the plan shall include detailed blast information such as a recommended maximum charge weight,

frequency and schedule of blasting, location of blasting, and any other necessary information.

- The blasting plan will outline the anticipated blasting procedures for the removal of rock material at the project site. The blasting procedures will incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The State, or its construction contractor will keep a record of each blast for at least one year from the date of the last blast.

- Appropriate noise and vibration modeling will be performed as part of the plan preparation to confirm the resulting noise and vibration levels at the nearest local sensitive receptors.

- The plan will require appropriate noise and vibration mitigation measures as described below and appoint a noise disturbance coordinator. The noise disturbance coordinator will have the authority to modify the construction schedule and mitigation measures. The public will be notified of the schedule for construction activities expected to produce high levels of noise and vibration, and all resident complaints will be responded to.

Mitigation measures to be implemented will include but not be limited to:

A) Restrict blasting charge weight to appropriate levels determined in the blasting plan to prevent damage to buildings.

B) Install temporary noise barriers to block the path from construction noise sources to receivers (residences within 1,000 feet of the project site). This measure will be effective only if the barrier is near the source or the receiver.

C) If blasting-related noise and vibration levels at local sensitive receptors cannot be fully mitigated by the measures described above as confirmed in the blast plan's noise and vibration modeling, blasting will not be performed at the project site and other methods (such as use of an impact hammer) will be performed instead.

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—*Less than Significant*

Construction

As described under checklist criterion (a) above, construction of the Proposed Project would involve the use, transport, storage, and potential disposal of hazardous materials. Construction equipment would use and require hazardous materials, such as fuel, lubricant,

oil, etc., some amount of which would be stored on-site, transported to the site, and/or disposed of following use. The possibility exists for upset or accident conditions to occur (e.g., spill or leak of stored fuel or lubricant) during the course of Project construction, which could endanger the public or the environment. However, given compliance with applicable OSHA, Cal/OSHA, DTSC, and County regulations pertaining to hazardous materials (CCC would require compliance with applicable hazardous materials regulations through its contract documents), such upset and accident conditions would not be considered reasonably foreseeable. Therefore, significant impacts would not be likely to occur. This impact would be **less than significant.**

Operation

As described under checklist criterion (a) above, the Project may include an AST for storage of diesel fuel for operation of the new water tank's pump. If this tank were to be included as part of the project, it could potentially pose a hazard to the public or the environment if it were to rupture or fail during a seismic event or other upset or accident conditions. However, as described under checklist criterion (a), the AST would be designed and operated in accordance with all federal, state, and local laws, and would include secondary containment facilities to capture the stored diesel fuel in the event the primary containment facility failed under upset or accident conditions. The AST also would be included in a Hazardous Materials Business Plan, which would identify appropriate emergency response measures. Given compliance with existing laws and regulations, the Proposed Project would not be anticipated to create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials**.** This impact would be **less than significant.**

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 schools or proposed schools are located within one-quarter mile of the project site. There is a daycare facility approximately 0.5 mile south of the project site, but this facility would not be anticipated to be affected by any potential hazardous materials emissions during Project construction or operation due to the distance from the project site and the Proposed Project's compliance with all applicable federal and state hazardous-materials related regulations. **No impact** would occur.

d. 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—*Less than Significant with Mitigation*

As described in the Environmental Setting above, the Phase I ESA conducted for the project site identified three RECs on the CCC property: (1) the site was listed on the Geotracker database (SWRCB 2016) for an unauthorized release from a UST in 1989, and subsequent investigations revealed that petroleum hydrocarbons and fuel additives were present in the subsurface at concentrations exceeding regulatory MCLs; (2) the site previously contained

four tertiary wastewater treatment ponds (removed in 2010), which may have leached heavy metals, biological agents, or other contaminants into the soil, and (3) the existing buildings on the site contain asbestos, lead paint, and universal wastes, such as fluorescent light fixtures, household chemicals, and automotive batteries (URS 2015b). With regard to (1), the Phase I ESA found that the site is pending closure under the Central Valley RWQCB's Low-Threat Closure Policy, and, therefore, would not be expected to pose a significant environmental risk to the public or environment (URS 2015b). In regard to (2), the Sediment Investigation Report and subsequent Addendum performed for the area of the former wastewater treatment ponds found no evidence of contamination in the soil due to the past uses. The Sediment Investigation Report found that sediment samples from the former wastewater treatment pond location were comparable in composition to background soil samples and that metal concentrations in the sediment samples were considerably less than 40 CFR biosolid land application limits and OEHHA screening numbers (SWRCB 2009). Therefore, based on the results of the Sediment Investigation Report, it is not anticipated that any soil contamination associated with the former wastewater treatment ponds would be encountered during project excavation activities such that they could create a significant hazard to the public or the environment. In regard to (3), the Proposed Project would implement **Mitigation Measure HAZ-1**, which would ensure that existing asbestos, lead paint, and universal wastes are removed from the site/disposed of by licensed contractors. With implementation of **Mitigation Measures HAZ-1**, the Proposed Project would not be anticipated to create a significant hazard to the public or the environment from being located on a site that is included on a list of hazardous materials sites. This impact would be **less than significant with mitigation.**

e. Located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard for people residing or working in the study area—*No Impact*

The nearest airport to the project site is the Auburn Municipal Airport, which is located approximately 2.45 miles south-southwest of the project site. No airport land use plan has been adopted for the Auburn Municipal Airport. Because the project site would not be within 2 miles of the airport, **no impacts** would be anticipated to occur.

f. Located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the study area—*No Impact*

See discussion of 3.8.3(e) above.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan—*Less than Significant with Mitigation*

As described in Chapter 2, *Project Description*, the project site is in a relatively sparsely populated area of Placer County, characterized by low-density rural residential development. Christian Valley Road provides the only access road to the project site, the Placer Center, and neighboring residences. Project construction would involve substantial numbers of truck

trips for deliveries of materials and hauling/disposal of debris, during the project's demolition and site preparation phases, which could cause congestion on Christian Valley Road and potentially inhibit emergency vehicles. To minimize potential impacts on emergency responders and evacuation routes, the Proposed Project would implement **Mitigation Measure HAZ-3**, which would require implementation of a construction traffic management plan, including identification of haul truck routes, implementation of comprehensive traffic control measures, and notification of adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and any lane closures. While the Proposed Project's construction activities could potentially slow emergency vehicles (e.g., from haul truck traffic), with implementation of **Mitigation Measure HAZ-3**, any impacts are unlikely to be substantial. This impact would be **less than significant with mitigation.**

<u>Mitigation Measure HAZ-3</u>: Prepare and Implement a Construction Traffic Management Plan.

The construction contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. In developing and implementing this plan, the construction contractor shall coordinate with the County of Placer. The plan shall include, but will not be limited to, the following:

- Identification of construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the contract documents.

- Implementation of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs (if required), lane closure procedures (if required), and cones for drivers. Traffic control measures shall follow the standards and specifications contained in the *California Manual on Uniform Traffic Control Devices* (Caltrans 2014).

- Evaluation of the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period.

- Notification of adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.

- Development of a process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager. 24-hour contact information for the complaint manager shall be posted on-site.

- Documentation of road pavement conditions for all routes that would be used by construction vehicles before and after Project construction. Make

provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before Project construction.

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands— *Less than Significant*

As described in the Environmental Setting above, the project site and surrounding area are designated by CAL FIRE as moderate to high fire hazard severity zone areas (CAL FIRE 2007). In general, the project site and vicinity are rural areas with natural vegetation (trees) and relatively sparse development that could be considered wildlands or at the wildland-urban interface. The Proposed Project could potentially expose corpsmembers and staff and the proposed CCC structures to risk of loss, injury, or death involving wildland fires; however, because the Proposed Project would be a replacement of existing facilities, this risk would not be anticipated to be any greater than existing conditions. In addition, the Proposed Project would comply with the requirements in the Public Resources Code during construction activities for sites with forest-, brush-, or grass-covered land regarding use of spark arrestors on earthmoving and portable equipment and maintenance/storage of appropriate fire-suppression equipment. Therefore, this impact would be **less than significant.**

3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	☐	☒	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site?	☐	☐	☒	☐
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f. Otherwise substantially degrade water quality?	☐	☒	☐	☐
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j. Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

3.9.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

Section 303(d)—Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those 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 development of control plans to improve water quality. USEPA then approves the state's recommended list of impaired waters or adds and/or removes water bodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES. The NPDES is officially administered by the USEPA. In California, the USEPA has delegated its authority to the State Water Resources Control Board (SWRCB); the SWRCB in turn delegates implementation responsibility to the nine RWQCBs, as discussed with regard to the Porter-Cologne Water Quality Control Act below.

The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits.

General Permit for Construction Activities: Most construction projects that disturb 1 acre or more of land are required to obtain coverage under the SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires the applicant to file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances

and regulations; and present a list of BMPs that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to conduct monitoring and reporting to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program: The SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 people or more) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990.

Beginning in 2003, the SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000). The project site is covered under the most recent Phase II MS4 permit, General Permit for the Discharge of Storm Water from Small MS4s (Order No. 2013-0001-DWQ), which covers Phase II permittees within designated areas of Placer County (Placer County 2016a). Some requirements in the permit that may be applicable to the project are discharge prohibitions, effluent limitations, receiving water limitations, and provisions applicable to all traditional small MS4 permittees (SWRCB 2013).

State Laws, Regulations, and Policies

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (known as the Porter-Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface water and groundwater supplies. However, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing various sections of the CWA, such as Sections 402 and 303(d). In general, the SWRCB manages water rights and regulates statewide water quality, whereas the RWQCBs focus on water quality within their respective regions.

The Porter-Cologne Act requires the RWQCBs to develop water quality control plans (also known as Basin Plans) that designate beneficial uses of California's major surface water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a water body—i.e., the reasons why the water body is considered valuable. Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin Plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter-Cologne Act, Basin Plans must be updated every three years.

The project site is located in the Sacramento River Basin and San Joaquin River Basin and is under the jurisdiction of the Central Valley RWQCB (RWQCB 2015). The Water Quality Control Plan (Basin Plan) for the Central Valley Region establishes beneficial uses for major

surface waters within the Sacramento and San Joaquin River basins. These identified beneficial uses help establish a baseline for water quality planning and protection and enhancement of waterbodies. Beneficial uses may be assigned to minor surface waters on a case-by-case basis.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains a number of goals related to hydrology and water quality, including conservation of surface and ground water supplies; safeguard and maintenance of natural waterways to ensure water quality; and reduction of flood hazards both on-site and downstream. The Placer County General Plan (2013) similarly contains goals and policies to protect water quality, appropriately manage stormwater runoff and natural drainage, and to protect against flood hazards. One notable County policy is to encourage the use of natural stormwater drainage systems to preserve and enhance natural features.

3.9.2 Environmental Setting

Topography and Climate

The Auburn area, including the project site, is located on the western flanks of the Sierra Nevada Range. Specifically, the project site is located on the south side of Sugar Pine Mountain and has elevations ranging from 1,560 to 1,770 feet above msl, with a general slope downward from the northeast to the south-southwest (USGS 2015). Slopes are steeper on the north and northeast portions of the project site. Most of the project site has been previously graded and developed.

The Auburn area experiences hot, dry summers and cool, wet winters. Average maximum temperatures in the summer reach as high as 92.5 degrees Fahrenheit (°F) (WRCC 2016). Winters are generally mild with average temperatures ranging from 36.6 °F to 54 °F in January (WRCC 2016). Nearly all of the precipitation occurs from November through April. Average annual total precipitation in the Auburn area is approximately 34.4 inches (WRCC 2016). Although infrequent, precipitation may occur as snowfall.

Surface Water Hydrology and Stormwater

The project site is located within the greater Sacramento River Basin. In general, creeks within the basin that originate from the Sierra Nevada and Auburn area flow west through a system of natural channels and constructed canals before draining into the Sacramento River. The nearest surface waterbody to the project site is Orr Creek, which is south and west of the project site. Orr Creek is a seasonal creek with a total catchment area of approximately 9.4 square miles (USGS 2016). Most of the catchment area is undeveloped with approximately 44 percent of the catchment area as forest land and less than 1 percent as impervious surfaces (USGS 2016). In the project vicinity, Orr Creek flows west for approximately 4.7 miles until draining to Coon Creek, which then continues westward until reaching the Sacramento River.

The major inputs to Orr Creek occur through stormwater runoff via overland flows and ephemeral channels. Near the project site, stormwaters flow through constructed and natural

drainage channels. Runoff from the eastern portion of the project site is conveyed via a drainage ditch parallel to the north side of Iron Mine Road and a constructed channel just east of the existing handball courts (Figure 2-2). Flows are diverted to the south side of Iron Mine Road (approximately 180 feet east of Christian Valley Road) and into Orr Creek before passing to the west side of Christian Valley Road through a culvert (approximately 60 feet south of Iron Mine Road). No distinguishable drainage patterns are apparent on the western portion of the project site and runoff is assumed to flow overland until reaching Orr Creek or another offsite drainage feature.

Water Quality

No waterbodies in the Auburn area are listed on the CWA Section 303(d) list, and therefore none of these water bodies are considered to have impaired water quality (SWRCB 2015). However, receiving waterbodies downstream of Orr Creek, i.e., the lower portions of Coon Creek (from Pacific Avenue to Main Canal in Sutter County) and the Sacramento River, are listed as impaired. Listed contaminants for Coon Creek derive from unknown sources and include pesticides (Chlorpyrifos), fecal indicator bacteria (Escherichia coli), and unknown toxicity (SWRCB 2015).

Groundwater Resources

The project site is not located within a managed or identified groundwater basin nor within a groundwater basin recharge area. Due to the steeper terrain and generally shallow depths to bedrock or semi-impervious geologic units, groundwater resources within the Auburn area would likely be found perched above confining layers at very shallow depths with surface seepage and ponding common during the wet season. Based on the State's Geotracker database (SWRCB 2016) and a preliminary geotechnical investigation (Geocon Consultants, Inc. 2016), groundwater underlying the project site is typically encountered 2 feet bgs or less in the southern portions of the project site. Groundwater levels may fluctuate spatially and temporally depending on physical characteristics (e.g., underlying geology and topography), seasonal inputs (i.e., precipitation events), and local withdrawals (e.g., domestic usage, irrigation, and fire suppression).

Floodplains

The Federal Emergency Management Agency (FEMA) produces flood insurance rate maps that identify special flood hazard areas. The maps further classify these areas into "zones" that broadly characterize the potential risk of an area being inundated by a 100-year or 500-year flood in any given year. According to the applicable FEMA flood insurance rate map (06061C0286F), the project site is not located in a flood hazard area (FEMA 1998). No dams or levees are located adjacent to or upstream of the project site. Sugar Pine Mountain separates the project site from Lake Combie and Bear River.

Tsunamis, Seiches, and Mudflows

A tsunami is a series of long waves commonly caused by earthquakes or large landslides beneath the ocean. A tsunami can travel extremely quickly and be substantially greater in height than normal waves, thereby causing flooding of inland areas. The project site is located in the foothill of the Sierra Nevada, over 100 miles from the nearest coastline.

A seiche is a standing wave in an enclosed or partially enclosed body of water, such as a lake, bay, or estuary, which oscillates back and forth from one side of the waterbody to the other. The motion of a seiche is similar to that of water sloshing back and forth between the walls of a swimming pool. Seiches can be caused by earthquakes, tsunamis, very strong winds, and severe storm fronts. No large bodies of water are located adjacent to or upstream of the project site.

Mudflows are a form of mass wasting where soils become liquefied under heavy rainfall, snowmelt, and/or groundwater flows. Mudflows are similar to landslides but are triggered by excessive volumes of water, lowering the viscosity of the soils and allowing the material to flow greater distances and over more gradual terrain. A mudflow requires source material to be predominantly fine-grained material of silts and clays.

3.9.3 Discussion of Checklist Responses

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality—*Less than Significant with Mitigation*

Construction of the Proposed Project would involve ground disturbance which could result in sediments being transported into local storm drainage systems and degrade the quality of receiving waters. Construction-related activities would also include the potential storage, use, transport, and/or disposal of hazardous materials (e.g., fuels, oils, solvents) for construction equipment. Accidental spills of these materials or improper material disposal could pose a risk to groundwater underlying the spill or disposal area if the materials seeped into the soil or groundwater. In addition, ground-disturbing activities (such as trenching) could expose shallow groundwater and require groundwater dewatering, thereby providing a direct pathway for hazardous materials to 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 entered the existing stormwater system near the project site and ultimately were transported to the stormwater system's receiving water bodies, e.g. Orr Creek.

As discussed further in Section 3.8, *Hazards and Hazardous Materials*, storage or use of hazardous materials for 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 hazardous materials would take place in the project site other than what would be necessary for standard construction activities. Furthermore, hazardous materials would be disposed of at an appropriate hazardous materials disposal facility or landfill in accordance with all applicable hazardous materials and hazardous waste regulations.

The Proposed Project would be required to comply with applicable NPDES permits such as the NPDES General Permit for Construction Activities and if needed, the NPDES General Dewatering Permit. As part of its compliance with these NPDES permits, a SWPPP would prevent polluted dewatered groundwater from being discharged to surface waters or

groundwater. In additional to implementing all NPDES permit requirements, implementation of **Mitigation Measure GEO-1** would ensure this impact would be less than significant by requiring the development and implementation of adequate erosion control, spill prevention, and other construction BMPs that would protect groundwater and surface water quality. Therefore, this impact would be **less than significant with mitigation**.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or lowering of the local groundwater table level—*Less than Significant*

As discussed above in Section 3.9.2, the project site is not located within a publically or privately managed groundwater basin or aquifer nor within a groundwater basin recharge area. Local groundwater resources underlying the project site are anticipated to be very shallow. It is possible that shallow groundwater may be encountered during excavation for building footings and foundations. Construction activities in contact with groundwater could transport pollutants directly to the groundwater, and dewatering effluent could transport pollutants to local surface waters.

In the event that groundwater dewatering is required, the Proposed Project would fully comply with NPDES requirements, including a General Dewatering Permit. This permit contains requirements to ensure that water quality standards would not be violated and that water quality would not be substantially degraded. Additionally, water resources used for dust and erosion control would be supplied via water trucked in from outside sources. Thus, potential water quality impacts from dewatering would not be significant.

During operation of the Proposed Project, canal water would be used for irrigation and fire flows and stored in the proposed water tank, and potable water would be supplied to the new buildings. It is possible that either the non-potable (canal) or potable water originate from groundwater supplies; although as discussed further in Section 3.17.2, surface waters serve as the primary water sources for both potable and non-potable supplies. Furthermore, it is not anticipated that irrigation activities or potable water demands for the Proposed Project would substantially differ from the existing conditions, and may even be less than existing water uses. In addition, possible use of the water for firefighting purposes would likely be an infrequent occurrence. Thus, the Proposed Project's operation-related water use would not substantially deplete groundwater supplies. Therefore, this impact would be **less than significant**.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, resulting in substantial erosion or siltation on-site or off-site—*Less than Significant with Mitigation*

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 increasing on-site susceptibility to erosion and potentially resulting in subsequent water quality impacts if sediments were transported to downstream water bodies. These impacts are considered potentially significant. Implementation of **Mitigation Measure GEO-**

1 would minimize construction-related water quality impacts by containing sediments on-site, implementing barriers or other measures to prevent runoff from the site to downstream surface waters, and revegetating disturbed areas. Following mitigation, these impacts would be less than significant.

The existing stormwater drainage system is very limited and consists of one constructed, short drainage channel that directs runoff south to Iron Mine Road and earthen drainage ditches lining the roadway. All other stormwater infiltrates or flows overland until reaching natural drainage channels downslope.

As part of the Proposed Project, a new stormwater system would be installed to capture runoff generated onsite from new and existing impervious surface areas. The drainage system would consist of vegetated bio-retention swales, open channels, culverts, and/or pipelines connected to the existing drainage channels at the south of the site. A bio-retention basin would be constructed on the project site, potentially southeast of the proposed dormitory building and basketball court. Overland runoff flowing downhill towards the project area and runoff from the basketball court and the dormitory building roof would be directed toward the bio-retention basin. Near the proposed kitchen/multipurpose building, an existing culvert and small drainage channel may be modified to relocate or extend the culvert and partially or completely fill the existing drainage channel. The new drainage system would improve the current conditions by reducing the magnitude of stormwater flows, dissipating erosive energy, and providing primary water quality treatment prior to captured runoff discharging to existing drainage channels east of Christian Valley Road.

In addition, as discussed above in Section 3.9.1, applicable state water quality regulations would require implementation of BMPs and other post-construction measures to minimize the discharge of pollutants, as described in the Phase II NPDES MS4 Permit. BMPs applicable to the project would include site design measures, source control, runoff reduction, stormwater treatment, and baseline hydromodification management, as defined in the Phase II NPDES MS4 Permit (No. CAS000004, Water Quality Order No. 2013-0001-DWQ).

With implementation of applicable NPDES permit requirements and **Mitigation Measure GEO-1**, this impact would be **less than significant with mitigation**.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff resulting in flooding on-site or off-site—*Less than Significant*

Although no streams or other surface waters are present within the project site, as discussed in checklist criteria 3.9.3(a) and (c) above, 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 design, implementation, and maintenance would ensure that the rate or amount of surface runoff from the project site would be reduced prior to discharge to the downstream existing stormwater infrastructure. Thus, the Proposed Project would not result in flooding on-site or off-site. Therefore, this impact would be **less than significant**.

e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff—*Less than Significant with Mitigation*

See discussion of 3.9.3(c) above. Compliance with NPDES permit requirements and implementation of **Mitigation Measure GEO-1** would minimize the potential for the Proposed Project to create or contribute polluted runoff or exceed the capacity of the existing stormwater system because they would require implementation of BMPs for erosion control and hazardous materials containment. Following construction, runoff from parking lots and other onsite impervious surfaces would be captured and conveyed to vegetated bio-retention swales or a bio-retention basin. The new stormwater drainage system and bio-retention features would reduce stormflow magnitudes and provide primary treatment of runoff. The new stormwater drainage system would be an improvement over current site and operating conditions. This impact would be **less than significant with mitigation**.

f. Otherwise substantially degrade water quality—*Less than Significant with Mitigation*

See discussion of 3.9.3(a) and (c) above. Compliance with NPDES permit requirements and implementation of **Mitigation Measure GEO-1** would minimize the potential for the Proposed Project to substantially degrade water quality. This impact would be **less than significant with mitigation**.

g. Place housing within a 100-year flood hazard area, as mapped on a federal flood hazard boundary or flood insurance map or other flood hazard delineation map—*No Impact*

The project site is not within a designated FEMA flood hazard area. There would be **no impact**.

h. Place structures within a 100-year flood hazard area resulting in impeding or redirect flood flows—*No Impact*

As described above in 3.9.3(g), the Proposed Project is not within a 100-year flood hazard area. Thus, the Proposed Project would not place any structures within a 100-year flood hazard area or redirect flood flows. Therefore, there would be **no impact**.

i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding resulting from the failure of a levee or dam—*Less than Significant*

As described above in 3.9.3(g), the Proposed Project is not within a 100-year floodplain and not downstream of any large surface waters. The project does include construction of the new 300,000-gallon water tank. In the event of catastrophic failure of the tank, areas downstream of the new tank may be at risk of localized flooding. Fabrication of the new water tank would adhere to the current CBC standards for appropriate material, construction methods, and

required routine inspections. Adherence to CBC standards would reduce the risk of tank failure and flooding to **less than significant**

j. Contribute to inundation by tsunami, seiche, or mudflow—*Less than Significant*

The project site is located in the foothills of the Sierra Nevada and a great distance from the ocean or large bodies of water. The project site is not at risk from a tsunami or seiche and there would be no impact.

The areas north and east of the project site are relatively steep with 15 to 50 percent slopes (NRCS 2015). Although the area averages over 34 inches of precipitation annually, large winter storms may release significant volumes within a short time period, with past storms recording over 5 inches within a 24-hour period (WRCC 2016). However, soils in the area consist primarily of very stony, sandy, loam and lack the necessary physical properties to become liquefied. For further discussion on soils, permeability, and runoff potential, refer to Section 3.6, *Geology, Soils, and Seismicity*. Additionally, surrounding slopes near the project site appear stable and no signs of historic or recent mass wasting events are present (Geocon Consultants, Inc. 2016). For these reasons, impacts related to tsunami, seiche, or mudflows would be a **less than significant.**

3.10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 Regulatory Setting

Federal and State Laws, Regulations, and Policies

There are no federal or state laws or regulations that would be applicable to the Proposed Project.

Local Laws, Regulations, and Policies

Development activities on state-owned land are exempt from local laws, regulations and policies. However, such laws, regulations and policies may apply to development activities not located on the project site (e.g., connections to infrastructure within the public right-of-way). The Auburn/Bowman Community Plan (1999) guides land use and development in the project site. The Placer County General Plan (2013), which governs land use in unincorporated Placer County in general, is generally consistent with the Auburn/Bowman Community Plan. The project site does not appear to be included within the Placer County Conservation Plan area.

3.10.2 Environmental Setting

The project site is located in unincorporated Placer County, about 7 miles north of the City of Auburn. The Placer County General Plan update (Placer County 2013) identifies the area around the Proposed Project as Rural Residential. This categorization allows for dispersed single family residents and smaller-scale farming and ranching. Parks and public utility and safety facilities are also compatible with this designation (Placer County 2013). Zoning maps

indicate that parcels in the vicinity have a minimum size of 4.6 acres, and are zoned as "residential-agriculture" and "farm" (Placer County 2015a).

The CCC property is located at the north terminus of Christian Valley Road. Iron Mine Road branches to the east off of Christian Valley Road approximately 375 feet south of the Placer Center. Nancy Road branches eastward from Christian Valley Road approximately 350 feet south of Iron Mine Road. Both of these roads provide access to small clusters of residents in proximity (approximately 500 to 1000 feet) to the CCC facility. In addition, numerous driveways to residences exit directly off of Christian Valley Road within 0.6 miles south of the Placer Center.

Development on the parcels owned by CCC is limited to the Placer Center, which contains 15 buildings built between 1948 and 1952, and between 1981 and 1993. The Placer Nature Center is located about 250 feet north of, and on the same parcel as, the Placer Center. The Nature Center is comprised of four buildings, as well as a greenhouse, a garden and compost area, an outdoor theater, a picnic area, a replica Maidu Indian village, and numerous nature trails. The Nature Center buildings appear to have been built around 1994.

3.10.3 Discussion of Checklist Responses

a. & b. Divide an established community, or conflict with land use plans or policies—*No Impact*

The Proposed Project consists of the demolition of some of the existing buildings at the Placer Center and the construction of new buildings as replacement facilities. This work would not change the overall size of the current Placer Center footprint or the nature of the work performed there. The Proposed Project would not divide an established community or conflict with land use plans or policies. The Proposed Project would be compatible with surrounding land uses. Therefore, there would be **no impact.**

c. Conflict with any habitat conservation plan or natural community conservation plan—*No Impact*

The project site is not within the jurisdiction of a habitat conservation plan or natural community conservation plan. Thus, no conflict with Habitat Conservation Plans (HCPs) or natural community conservation plans would occur. Therefore, there would be **no impact.**

3.11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

3.11.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by the CDC and CGS following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999), Environmental Resources Management Element, contains goals and policies related to mineral resources identification and protection, and mineral resources development in keeping with sound conservation and reclamation practices. The Placer County General Plan (2013) contains similar goals and policies related to mineral resources conservation and production, including discouragement of development of any uses that would restrict future extraction of significant mineral resources or of incompatible uses in areas that have been identified as having potentially significant mineral resources.

3.11.2 Environmental Setting

According to the Auburn/Bowman Community Plan (1999), the Auburn/Bowman Community Plan area does not contain any substantial mineral resources, based upon the classification studies prepared by the CDC. However, a number of mineral resources can be found in the Auburn area, including lode and placer gold, chromite, copper, asbestos, zinc, talk and limestone. Placer County in general is not facing issues of aggregate sustainability (CGS 2012). According to CGS (2012), 50-year demand for aggregate material is between 200 and 500 million tons, and permitted reserves are greater than or equal to that demand.

3.11.3 Discussion of Checklist Responses

a. Loss of availability of mineral resources—*No Impact*

As described in the Section 3.11.2 above, no substantial mineral resources are known to exist on or in close proximity to the project site. Some mineral resources can be found in the Auburn area, but none of regional significance as identified by the CDC. Given that the project site is not located in a historic floodplain or adjacent to a river, it is unlikely there are substantial aggregate resources on the site. Even if mineral resources were present within the site, however, the Proposed Project would not be anticipated to preclude future development of such resources. The Proposed Project would be limited to construction of dormitory, kitchen, and associated facilities, and would not involve extraction of mineral resources. Therefore, there would be **no impact**.

b. Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan – *No Impact*

No locally important mineral resource recovery sites are delineated near the project site in the Placer County General Plan or Auburn/Bowman Community Plan. Therefore, there would be **no impact**.

3.12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e. For a project located within 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?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Project site to excessive noise levels?	☐	☐	☐	☒

3.12.1 Overview of Noise and Vibration Concepts and Terminology

Noise

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable

level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

- **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
- **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Maximum sound level (L_{max})** is the maximum sound level measured during a given measurement period.
- **Minimum sound level (L_{min})** is the minimum sound level measured during a given measurement period.
- **Equivalent sound level (L_{eq})** is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.
- **Day-night sound level (L_{dn})** is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.
- **Community noise equivalent level (CNEL)** is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. Table NOI-1 presents approximate noise levels for common noise sources, measured adjacent to the source.

Table NOI-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Source: Caltrans 2009

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as impact hammering. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency

vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

3.12.2 Regulatory Setting

Federal Laws, Regulations, and Policies

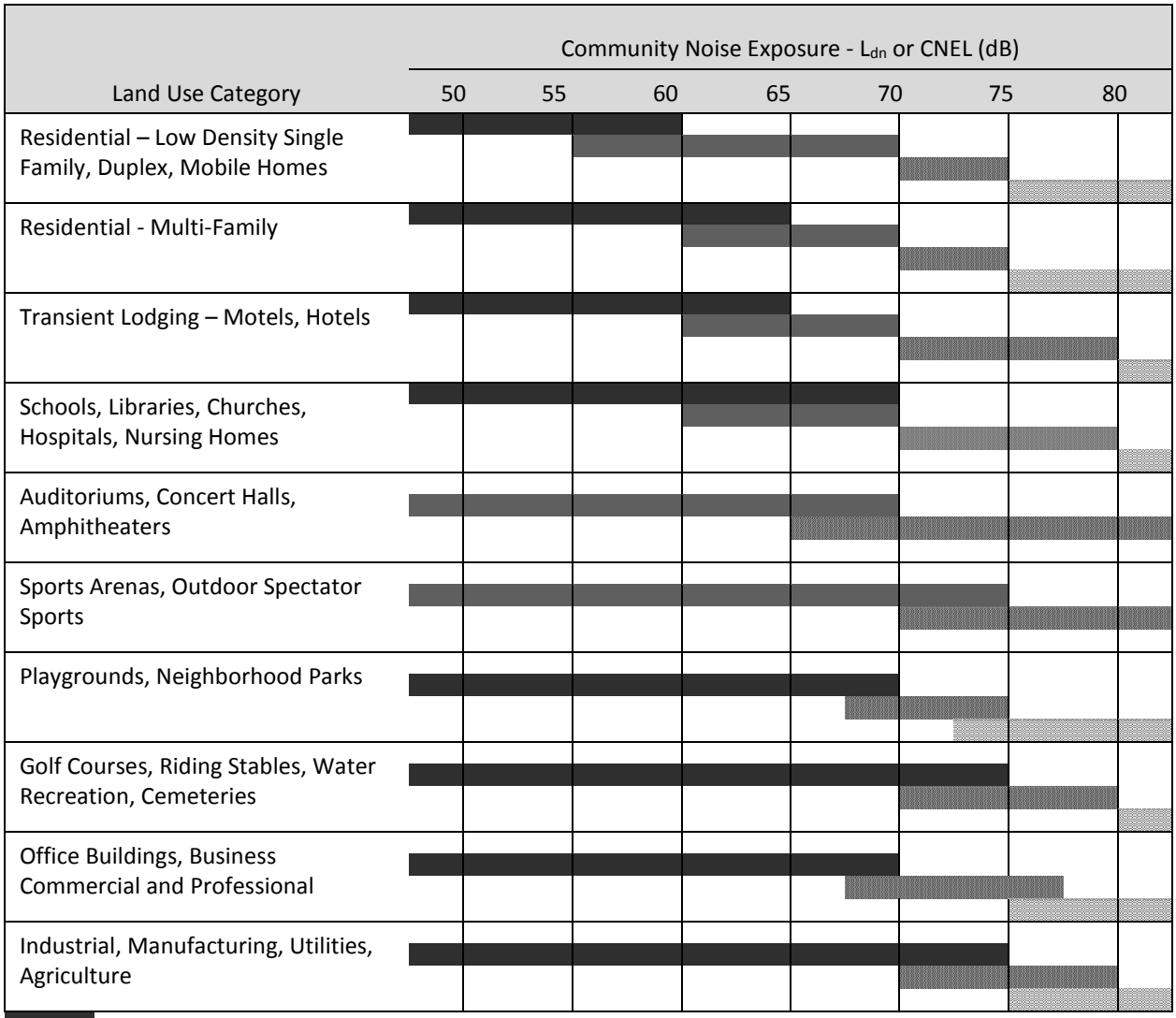
No federal laws, regulations, or policies for construction-related noise and vibration that apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in *Transit Noise and Vibration Impact Assessment* state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA L_{eq} should be used for residential areas (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.3 inch per second (in/sec) PPV for engineered concrete and masonry structures and 0.12 in/sec PPV for buildings extremely susceptible to vibration damage (FTA 2006).

State Laws, Regulations, and Policies

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in Table NOI-2.

Table NOI-2. State Land Use Compatibility Standards for Community Noise Environment



Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development generally should not be undertaken.

Local Laws, Regulations and Policies

Placer County Noise Ordinance

Placer County's Noise Ordinance (Placer County Code, Article 9.36 Noise) provides daytime and nighttime noise standards, and identifies exemptions to these noise standards. Construction-related noise between the hours of six a.m. and eight p.m. Monday through Friday, and between the hours of eight a.m. and eight p. m. Saturday and Sunday is exempt from the noise standards. The exemption also requires that construction equipment be maintained in good working order and fitted with factory installed muffling devices. The daytime noise standards are an hourly L_{eq} of 55 dB and an L_{max} of 70 dB. Nighttime noise standards for L_{eq} and L_{max} are 45 and 65, respectively. (Placer County 2016b).

Local Plans and Policies

The Auburn/Bowman Community Plan contains a number of goals and policies related to noise of potential applicability to the Proposed Project, including generally to protect community plan area residents from the harmful and annoying effects of exposure to excessive noise, and to preserve the rural noise environment of the community plan area. The Community Plan establishes hourly L_{eq} daytime and nighttime noise thresholds of 50 dB and 45 dB, respectively, and maximum level daytime and nighttime noise thresholds of 70 dB and 65 dB, respectively. The Placer County General Plan contains similar goals and policies related to noise with more detailed (i.e., broken out by zone districts and indoor vs. outdoor) noise thresholds.

3.12.3 Environmental Setting

The project site is located in a rural area with scattered residences. With respect to groups that could be exposed to noise generated by the Proposed Project, recreational and residential land uses are located near the site. The Placer Nature Center is located approximately 490 feet northwest from the middle of the project site. Nearest residences to the project site, as measured from the middle of the site, are located approximately 530 feet to the south and 1,000 feet to the east. No hospitals or schools are located near (within 2 miles of) the project site. Ambient noise in the project site is influenced by noise from vehicular traffic on Christian Valley Road and the nearby recreational and residential activities (i.e., landscape maintenance, delivery vehicles, people talking, parking lot vehicle movements, car doors closing, and dogs barking).

3.12.4 Discussion of Checklist Reponses

a. Noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state or federal standards—*Less than Significant with Mitigation*

The Proposed Project would generate noises associated with construction activities, which would be temporary and cease once construction is complete. Operational noise sources would include vehicle traffic from CCC staff, visitors, and delivery vehicles.

Activities on the state-owned land would be exempt from local noise standards. Regardless, the Placer County Noise Ordinance is informative as it indicates what is typically considered appropriate for construction-related noise in the project vicinity. The Proposed Project would be consistent with the Placer County Noise Ordinance, which exempts from regulation noises associated with construction activities that take place between 6:00 a.m. and 8:00 p.m. on Monday through Friday, or between 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays provided the construction equipment is fitted with factory installed muffling devices and maintained in good working order. As described in Chapter 2, construction would occur within these time periods. **Mitigation Measures NOI-1 and NOI-2**, ensure that the construction equipment have muffling devices and are maintained in good working order.

Further discussion of the anticipated noise associated with the Proposed Project's construction and operation, and consistency with relevant guidance, is provided below.

Construction

Because some recreational and residential areas are located near the project site, an evaluation of the noise levels compared to the values recommend by FTA was also conducted. The Placer Nature Center is located approximately 490 feet northwest from the middle of the project site. Nearest residences to the project site, as measured from the middle of the site, are located approximately 530 feet to the south and 1,000 feet to the east.

FTA has established guidance on noise and vibration impact assessments for construction equipment (FTA 2006). FTA recommends that, for an approximate estimate of construction noise levels, the two loudest pieces of equipment should be used to analyze the anticipated noise levels at sensitive receptors, assuming the following:

- full power operation for a full 1-hour is assumed,
- there are no obstructions to the noise travel paths,
- typical noise levels from construction equipment are used, and
- all pieces of equipment are assumed to operate at the center of the project site.

Using these assumptions, the noise levels at specific distances can be obtained using the following equation:

$$L_{eq}(equip) = EL_{50ft} - 20log_{10}(D/50)$$

Where:

L_{eq} (equip) = the noise emission level at the receiver at distance D over 1 hour

EL_{50ft} = noise emission level of a particular piece of equipment at a reference distance of 50 feet

D = the distance from the receiver to the piece of equipment in feet

To add the two loudest pieces of equipment together, the following equation applies:

$$L_{total} = 10\ log_{10}(10^{\frac{L1}{10}} + 10^{\frac{L2}{10}})$$

Where:

L_{total} = the noise emission level of two pieces of equipment combined

L_1 = the noise emission level of equipment type 1

L_2 = the noise emission level of equipment type 2

Noise sources during project construction would include the operation of construction equipment and, potentially, blasting activities to breakup the underlying bedrock. Because blasting is a unique element of the construction process, its noise impacts are considered individually. Noise levels at the Proposed Project's nearest sensitive receptors that would be generated by equipment used during project construction were estimated by using the FTA's noise and vibration reference guide and some reference noise levels from the Federal Highway Administration (FHWA) Construction Noise Handbook (FTA 2006; FHWA 2016). The reference noise level for the Proposed Project's two loudest pieces of potential equipment, an impact hammer and a scraper, at 50 feet were 90 and 89 dBA, respectively.

Using the equations above and the two loudest pieces of equipment, the noise levels at the nearest residence, located approximately 530 feet south of the middle of the project site, would be 72 dBA. The noise levels at the Placer Nature Center, located approximately 490 feet away from the middle of the project site, would be approximately 73 dBA. These estimates are both below the FTA's recommended level of 90 dBA. Construction noise at these levels would be greater than existing noise levels at nearby sensitive receptor locations. However, construction activities would be short term (24 months) and intermittent. The use of diesel-powered construction equipment would be temporary and episodic, affecting only a few nearby receptors for a limited period. Noise calculations are detailed in Appendix D.

Blasting has a noise reference level at 50 feet of 94 dBA (Lmax) (FHWA 2016). Blasting-related noise levels at the Placer Nature Center and the nearest residences would be approximately 74 and 73 dBA, respectively. Similar to the construction equipment-related noises, blasting noise levels would be below the FTA's recommended level of 90 dBA and would be temporary. Construction activities, including blasting, would result in noise levels greater than the Placer County noise ordinance's daytime standards; however, the noise ordinance exempts construction activities and the noise ordinance would not be applicable to the Proposed Project. Implementation of **Mitigation Measures NOI-1 and NOI-2** would require standard noise mitigation measures during construction to ensure that noise levels are minimized and consistent with local noise standards.

For these reasons, the temporary increases in ambient noise levels associated with construction would be less than significant with mitigation.

Operation

Operation of the proposed CCC Placer Center's new dormitory and kitchen/dining room/multipurpose room buildings would not alter the potential noises associated with the CCC Placer Center's existing operation. Operation of the updated CCC Placer Center buildings would potentially generate noises associated with the onsite outdoor recreational activities, or other ambient noises associated with residential areas, such as vehicle doors shutting, and landscape maintenance activities. The emergency generator and fire alarms would be infrequently operated or tested, during daytime hours, as part of their maintenance procedures. In addition, traffic to/from the CCC Placer Center would not be anticipated to change from as a result of the Proposed Project since the CCC staff and corpsmembers would be the same as the existing CCC personnel. Therefore, since the CCC Placer Center's operations under the Proposed Project would be negligibly different than the existing conditions, operational noise-related impacts would be less than significant.

Overall, construction and operation of the Proposed Project would not conflict with applicable standards, and would be **less than significant with mitigation**.

Mitigation Measure NOI-1: Use Sound Attenuation Devices on Construction Vehicles.

All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for those types of equipment.

Mitigation Measure NOI-2: Shut Off Equipment When Not in Use.

Mobile noise-generating equipment and machinery shall be shut off when not in use.

b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels—*Less than Significant with Mitigation*

Vibration thresholds for buildings occur at a PPV of 0.12 in/sec for buildings extremely susceptible to vibration damage; the human perception threshold is at 65 VdB. Vibration and ground-borne noise levels were estimated following methods described in the FTA Noise and Vibration Impact Assessment (FTA 2006) to determine the PPV that could affect buildings and the VdB for annoyance. The analysis assumed that the equipment with the greatest vibration potential would have vibration sound levels similar to those of an impact hammer (also known as a hoe ram). Table NOI-3, below, shows relevant parameters for the impact hammer and distance to sensitive receptors to be below vibration thresholds.

Similar to the evaluation of noise impacts of blasting, vibration-related impacts of blasting have been considered separately due to it being a unique element of the construction process. Blasting has a noise vibration reference level at 50 feet of 100 VdB (FTA 2006). A building

vibration reference level is not readily available for blasting (FTA 2006). The nearest residences to the project site would be located within the human annoyance vibration threshold's distance (734 feet from the blast site), which would be a potentially significant impact.

Table NOI-3. Construction Equipment and Vibration Distance

Equipment	PPV at 25 ft.	Distance to PPV of 0.12 in./sec.	Noise Vibration Level at 25 ft.	Distance to Noise Vibration of 65 VdB
Impact hammer	0.089 in./sec.	20.5 feet	87 VdB	135 feet
Construction Method	PPV at 25 ft.	Distance to PPV of 0.12 in./sec.	Noise Vibration Level at 50 ft.	Distance to Noise Vibration of 65 VdB
Blasting	N/A	N/A	100	734 feet

Source: FTA 2006

Implementation of **Mitigation Measure HAZ-3** would require that all blasting activities be designed and implemented such that they would not exceed the building or human annoyance thresholds at the local sensitive receptors. Therefore, the impact of ground-borne vibration or ground-borne noise would be **less than significant with mitigation**.

c. Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project—*Less than Significant*

Construction of the Proposed Project would be short term (24 months) and would not result in any permanent increase in ambient noise levels. Proposed Project operations would not involve any sources of permanent, ongoing noise or noises that substantially differed from the CCC Placer Center's existing operations. Therefore, the Proposed Project would not substantially change the ambient noise levels at nearby sensitive receptors and this impact would be **less than significant**.

d. Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project—*Less than Significant with Mitigation*

As discussed under item 3.12.4(a) above, the Proposed Project would result in temporary increases in ambient noise levels during the proposed daytime construction activities. Temporary construction-related noise increases above ambient levels may be relevant if they are above 65 dBA (human annoyance threshold), which occurs for any sensitive receptors within roughly 1,200-1,400 feet of the project site, depending on the absence or occurrence of blasting activities. In addition, periodic increases in ambient noise levels would occur during operations related to activities such as emergency generator testing and use and testing of fire alarms on the buildings. Implementation of **Mitigation Measures NOI-1 through NOI-3** would reduce the impact of both temporary and periodic noise levels during construction activities, including blasting activities. This impact would be **less than significant with mitigation**.

e. For a project located within an airport land use plan area, or, 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 nearest airport to the project site is the Auburn Municipal Airport, which is located approximately 2.45 miles south-southwest of the project site. No airport land use plan has been adopted for the Auburn Municipal Airport. The Proposed Project would not increase the duration or frequency of people being in the airport area or increase the amount of air traffic. Therefore, there would be **no impact**.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project site to excessive noise levels—*No Impact*

The project site is not located in the vicinity of any private airstrip. Therefore, there would be **no impact**.

3.13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

3.13.1 Regulatory Setting

No federal or state laws, regulations or policies are applicable to population and housing in relation to the Proposed Project.

The Auburn/Bowman Community Plan (1999) generally ensures that sound and adequate housing is provided to residents and that housing is sufficient to meet future needs anticipated in population projections. Since the Proposed Project is only a housing replacement project, the goals or policies in the Community Plan would generally not be applicable to the Proposed Project. The Placer County General Plan (2013) is generally in line with the Auburn/Bowman Community Plan and contains similar goals and policies related to population and housing, including additional considerations for segments of the County population with special needs (e.g., seniors, persons and households in need of emergency shelter).

3.13.2 Environmental Setting

U.S. Census information indicates that the County had a population of 371,694 in 2014; this is a 6.7% increase from 2011 when there was a population of 348,432 (U.S. Census 2015). The Auburn Bowman Community Plan portion of the Placer County General Plan was last updated in 1999. It was reported that the population of the unincorporated area around the project site was 20,248 in 1990, the date of the last available census data for the Community Plan (Placer County 1999).

As of 2014, there were 157,446 housing units in the County (U.S. Census 2015). This is a 12% increase from 2006 when there were 140,330 units documented (California Department of Finance 2015).

The project site currently contains the facilities for the Placer Center, a work and training center that houses up to 128 individuals, plus an additional 12 CCC staff. The parcel that contains the CCC facility also houses the Placer Nature Center, a not-for-profit business that provides outdoor education programs for children in grammar school during weekdays, and is open to the public on Saturdays. The venue is available for private functions on Sundays.

3.13.3 Discussion of Checklist Responses

a. Directly or indirectly induce area population growth—*Less than significant*

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 (up to approximately 26 workers) and temporary (approximately 24 months).

Once completed, the Placer Center will be occupied by the same number of corpsmembers that currently live and train at the facility. As a result, there would be no increase in population and this impact would be **less than significant.**

b. & c. Displace Population or Housing— *Less than significant*

The Proposed Project involves the demolition of existing housing and the construction of updated replacement housing for the same number of people who currently occupy the facility. As noted in Section 2.4.3, corpsmembers living at the Placer Center would be temporarily reassigned to the CCC's Greenwood Center in Georgetown, California, about 11 miles southeast of the project site, from which they would perform their typical duties. The corpsmembers would be temporarily displaced as the result of the project, but they would return to the Placer Center once the replacement housing is completed. The Proposed Project would have a **less than significant** impact with regard to the displacement of housing or people.

3.14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Result in substantial 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 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 following public services:				
i. Fire protection?	☐	☒	☐	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

3.14.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to public services and the Proposed Project.

State Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR Part 9) establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of the California Fire Code (2013) contains the following requirements for fire safety during construction and demolition:

> **3304.4 Spontaneous ignition.** Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container.

3304.5 Fire watch. When required by the fire code official for building demolition, or building construction during working hours that is hazardous in nature, qualified personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.

3308.1 Program superintendent. The owner shall designate a person to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall be responsible for the guard service.

3308.2 Prefire plans. The fire prevention program superintendent shall develop and maintain an approved prefire plan in cooperation with the fire chief. The fire chief and the fire code official shall be notified of changes affecting the utilization of information contained in such prefire plans.

3310.1 Required access. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of support vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

3316.1 Conditions of use. Internal-combustion-powered construction equipment shall be used in accordance with all of the following conditions:

1. Equipment shall be located so that exhausts do not discharge against combustible material.

2. Exhausts shall be piped to the outside of the building.

3. Equipment shall not be refueled while in operation.

4. Fuel for equipment shall be stored in an approved area outside of the building.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies to ensure that public services and facilities are available to serve the needs created by the present and future development that occurs in the plan area. One fire protection goal identified in the Auburn/Bowman Community Plan is to provide self-supporting fire protection service. The Placer County General Plan (2013) contains goals and policies to ensure the timely development of public facilities and the maintenance of specified service levels for these facilities, including ensuring through the development review process that adequate public

facilities and services are available to serve new development and requiring new development to fund its fair share of the cost of constructing any needed new development.

3.14.2 Environmental Setting

Police Protection

Police protection at the project site is provided by the Placer County Sheriff's Department. The Sheriff's Department has a total staff of 519, 137 of which are sworn field operations positions (Placer County No Date). Six deputies were assigned to the Auburn/Bowman Plan area as of 1999 (Placer County 1999). In 2014, the Department's Dispatch Services Unit handled a total of 98,679 calls for service for the County as a whole, which was an increase of 25,990 calls over the previous year (Placer County Sheriff's Office 2014). With respect to calls for service in the project's surrounding area, the Auburn/Bowman Community Plan estimated in 1990 that approximately 7 percent of the total calls received in the County were from the Auburn/Bowman Plan area. Extrapolating this ratio to the 2014 numbers would equate to roughly 6,908 calls for service in the Auburn/Bowman Plan area.

Fire Protection

Fire protection is provided to the project site by CAL FIRE (Placer County 1999). CAL FIRE serves the Bowman and Christian Valley area northeast of Auburn with one fire truck assigned from the Placer Ranger Unit Headquarters, located in the Bowman area at Lincoln Way and Rhodes Krueger Drive, approximately 4 miles southwest of the project site. CAL FIRE has automatic aid agreements in place from both the Auburn Fire Department and the Placer Foothills Consolidated Fire Protection District (Placer County 1999).

The Auburn/Bowman Community Plan (1999) states: "The level of fire protection service in the Bowman/Christian Valley area northeast of Auburn does not meet the generally accepted fire standards available to the remaining portions of the Auburn/Bowman Community Plan area. The service level for this area reflects a lack of adequate fire service funding by Placer County (Placer County 1999)." The Plan goes on to state, however, that "as a result of automatic aid (a dispatcher automatically alerts another department) or mutual aid (California Department of Forestry [CDF] requests assistance), structure fires in Bowman and Christian Valley actually receive a higher level of service [than those in the Placer Foothills Consolidated Fire Protection District] (ibid)."

The Captain at CAL FIRE's station in Bowman confirmed that adequate resources are available to serve the Christian Valley area with the automatic aid agreements in place (Ryan, pers. comm., 2016). He indicated that 5 engines and two water tenders would be responding to an emergency in the project areas, though the response time would not be as quick as it typically is in more populated areas. He estimated a 10-minute travel time to the project site (Ryan, pers. comm., 2016).

Schools

Education services are provided to the project site and the surrounding area by the Placer Hills Union School District. The Placer Hills Union School District occupies a portion of the

Auburn/Bowman Community Plan in the Christian Valley area, though the entire district serves the communities of Applegate, Eden Valley, Heather Glen, Meadow Vista, and Weimar (Placer County 1999). The District operates two schools: Sierra Hills School (K-3) and Weimar Hills School (K-8). The Auburn/Bowman Community Plan indicates that District schools have been significantly over-capacity (i.e., enrollment exceeds capacity), with the District as a whole at 135 percent of capacity as of 1999; however, the superintendent/secretary of the Placer Hills Union School District has indicated that the Community Plan numbers are out-of-date and the District is no longer over-capacity (Griffith, pers. comm., 2016).

Parks

Parks are provided to unincorporated areas of Placer County by the Placer County Parks and Recreation Department; however, no County parks exist nearby the project site. The nearest parks and recreational facilities are located within the City of Auburn and/or community of Meadow Vista.

Other Public Facilities

No hospitals, libraries, or other public facilities are located near the project site. The nearest hospital is located approximately 3.4 miles southwest of the project site.

3.14.3 Discussion of Checklist Responses

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 itself includes new and physically altered governmental facilities. The potential physical environmental impacts that could occur from provision of these new facilities are evaluated throughout this IS/MND and are not analyzed here. In general, the Proposed Project would not substantially increase the local population and therefore would not be anticipated to increase demand for government facilities. As described in Section 3.13, *Population and Housing*, it is anticipated that any population increase from construction workers temporarily relocating to the area would be minor and temporary (approximately 24 months). Once completed, the Placer Center would be occupied by the same number of corpsmembers as currently live and train at the facility plus some additional Corpsmember Orientation, Motivation, Education and Training (COMET) trainees for temporary periods of time. Any construction workers that relocate to the area may temporarily increase demand for government facilities, but not to a substantial degree. Potential impacts to specific types of public services/government facilities are described below.

i. Fire protection—*Less than Significant with Mitigation*

Operation of construction equipment during the Proposed Project's construction activities could potentially provide a spark to any ignitable material on-site and thereby increase fire danger. Likewise, storage and use of flammable/hazardous materials (e.g., gasoline, oil, etc.) during Project construction could increase fire/hazardous materials-related danger and potentially generate calls for service from the local fire protection agency (i.e., CAL FIRE). As

described above in Section 3.14.2, the Auburn/Bowman Community Plan (1999) considers the Bowman and Christian Valley area northeast of Auburn, which would include the project site, to be underserved as far as fire protection, with only one fire truck assigned to the area. However, the Plan also states that, due to automatic and mutual aid agreements, fires in the Bowman/Christian Valley area actually receive a higher level of fire protection than other regions in the Auburn/Bowman Community Plan area.

While Project construction activities could potentially generate fire protection service demand from upset or accident conditions, such demand is not anticipated or considered likely. Construction of the Proposed Project would follow the fire safety requirements specified in the California Fire Code (see Section 3.14.2 above), which would reduce fire risk during construction. If the Proposed Project were to require fire protection services during construction, it could potentially temporarily adversely affect response times/reduce available resources for other incidents in the area. However, given the automatic aid agreements in place between CAL FIRE and neighboring fire districts in Placer County, fire protection service would be anticipated to be adequate in the Bowman/Christian Valley Area, and any impacts on fire protection service from Project construction would not be anticipated to require construction of new or expanded fire protection facilities.

While the specific logistics for replacement of the existing water storage tank have not yet been determined (i.e., the new tank may be constructed alongside or in the location of the existing tank or near the Placer Center buildings or solar panels, and the existing tank may or may not be demolished or decommissioned), it is possible that onsite water supplies would be temporarily unavailable if the existing tank is decommissioned before the new water tank is operating and connected to the onsite non-potable (fire flow) water system. Implementation of **Mitigation Measure PUB-1** would ensure that sufficient onsite water supplies are available throughout the construction period for fire-fighting purposes, that any impacts associated with fire water supply from Project construction would be less than significant, and that no new or expanded fire facilities would need to be constructed.

Following Project construction, the same number of employees and corpsmembers would continue to operate out of the Placer Center, plus an additional number of COMET trainees for temporary time periods, and the existing firefighting activities would continue. As such, no reduction in firefighting service would occur over the long term. Additionally, the Proposed Project buildings and facilities would comply with the CBC for fire safety. The new proposed solar panel array would be designed and operated in accordance with industry standards and, therefore, would not be anticipated to pose any new substantial fire risk during project operations. As such, the new Proposed Project facilities would not be anticipated to pose any elevated risk above the existing structures, and would not require construction of any new or expanded fire facilities. This impact would be **less than significant with mitigation.**

<u>Mitigation Measure PUB-1</u>: Maintain Onsite Water Supplies throughout Construction.

The State or its construction contractor shall ensure that onsite water supplies remain available throughout the Project's entire construction period for fire-fighting purposes. As appropriate, onsite water sources may include the existing tank, the proposed tank, potable water supplies, or a temporary water storage tank. Any of

these water sources must be capable of supplying sufficient quantities of water to fire fighters in the event of a fire.

ii. Police protection—*Less than Significant*

The Proposed Project would not be anticipated to generate substantial police protection demand during construction or operation. Project construction would require substantial numbers of truck and vehicle trips, primarily during the demolition and site preparation project phases. As such, Project construction could potentially contribute to traffic-related incidents which may require responses by Placer County Sheriff deputies, but any such impacts would not be anticipated to be substantial. As described in **Mitigation Measure HAZ-4**, the construction contractor would develop and implement a Traffic Management Plan, which would further reduce the potential for any traffic incidents resulting from the Proposed Project.

As described in Section 3.13, *Population and Housing*, the Project would not increase the local population; the Placer Center would house the same number of staff and corpsmembers following Project construction as currently reside there. Therefore, the Proposed Project would not be anticipated to increase police protection service demand over the long term, and would not require construction of any new or expanded police protection facilities. This impact would be **less than significant.**

iii. Schools—*Less than Significant*

As described in Section 3.13, *Population and Housing*, the Proposed Project would not substantially increase population, as the same number of staff and corpsmembers would reside at the Placer Center following Project construction as under existing conditions. Additionally, given that corpsmembers are between the ages of 18 and 25 and serve one year with the CCC, even if increased numbers of corpsmembers were to reside at the Placer Center in the future as a result of the Proposed Project, it would be unlikely to have any effect on schools (i.e., corpsmembers would be unlikely to establish permanent residence in the area or have school-age children). As such, the Proposed Project would not be anticipated to have any effect on schools over the long-term. The potential exists for some construction workers to temporarily relocate to the area during Project construction (anticipated to last two years) and potentially enroll their children in local District schools. However, such an occurrence would not be anticipated to have a significant effect on school service ratios or to require construction of new or expanded school facilities. This impact would be **less than significant.**

iv. Parks—*Less than Significant*

As described in the Environmental Setting above, there are no parks within the immediate Project vicinity. The nearest parks would be within the City of Auburn or the community of Meadow Vista, both several miles away from the project site. The potential exists for construction workers to temporarily relocate to the project site during the anticipated two-year construction period and potentially use parks in neighboring communities. However, any impacts on park service ratios from temporary construction workers (up to approximately 26) would be unlikely to be substantial or require construction of new or expanded facilities. Over the long-term, the Placer Center is not anticipated to host any more

staff and corpsmembers than currently reside there, and, given that the Proposed Project will include recreational facility components (e.g., new basketball court and the multipurpose building's amenities), staff and corpsmembers would be unlikely to travel long distances to use parks in Auburn or Meadow Vista. Therefore, this impact would be **less than significant.**

v. Other Public Facilities—*Less than Significant*

As described in preceding impact discussions, the Proposed Project would not be anticipated to substantially increase the local population. The Placer Center would maintain the number of corpsmembers and staff following Project construction, with an additional number of COMET trainees located at the center during their initial orientation. The potential exists for construction workers to temporarily relocate to the area during the two-year construction period and potentially require or use hospital, libraries, or other public facilities/services. However, the number of construction workers (up to approximately 26) that may relocate to the area would not be sufficient to substantially affect service ratios or require construction of new or expanded facilities. Likewise, the number of possible new COMET trainees would not be sufficient to result in significant adverse impacts. This impact would be **less than significant.**

3.15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 that might have an adverse physical effect on the environment?	☐	☐	☒	☐

3.15.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to recreation and the Proposed Project.

State Laws, Regulations, and Policies

No state laws, regulations, or policies apply to recreation and the Proposed Project.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies for protection of open areas and greenbelts for enjoyment by residents, as well as creation of a pedestrian and trail network to provide access to open space and recreation resources. The Placer County General Plan (2013) contains additional goals and policies related to recreation that generally serve to promote development and preservation of adequate recreational facilities and parklands.

3.15.2 Environmental Setting

The CCC Placer Center shares its property with the Placer Nature Center, a not-for-profit organization that operates an outdoor education program in facilities located about 300 feet north of the project site. Access to the Placer Center is via a driveway off of Christian Valley Road. At the south boundary of the CCC Placer Center campus, the road forks to the west and loops around the west side of the CCC facilities to a parking area developed for the Placer Nature Center. The programs at the Placer Nature Center are primarily for students from kindergarten through sixth grade, but the Nature Center also provides classes for teachers, holds a summer camp for children, and is available for special events, such as birthday

parties. The 2016 schedule for the facility (Placer Nature Center 2015) indicates that school programs will be in session Monday through Friday between 9am and 2pm, and that it will be open to the public on Saturday from 9am to 4pm. The existing CCC Placer Center site includes a baseball field and bleachers, a handball court, and a theater/recreation hall. Parks and recreational facilities maintained and operated by the State, County, and private entities near the project site are listed in Table REC-1.

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

Park/Facility Name	Ownership	Approximate Distance from Proposed Site (miles, by road)	Features
Placer Nature Center	Placer Nature Center, not-for-profit corporation	250 feet, north	Outdoor education
Winchester Country Club	Semi-private country club and golf course	1 to 1.3 miles, northeast to southeast	Golf
Combie Reservoir	Nevada Irrigation District	1.6 miles, northeast	Restricted public access; mixed use boating (waterskiing, jet skiing, fishing, general boating)
Black Oak Golf Course	Privately held, public access golf course	1.7 miles, south	Golf
Combie Trail	County of Placer	2.5 miles east	Multi-use trail; horses, biking, hiking
Halsey Forebay	PG&E/California Department of Fish and Wildlife	2.17 miles, southeast	Fishing

Sources: Black Oak Golf Course 2015; California Department of Fish and Wildlife 2015; Nevada Irrigation District 2015; Placer County 2015b; Placer Nature Center 2015; Winchester Country Club 2015.

3.15.3 Discussion of Checklist Responses

a. Increase use of existing parks or recreational facilities—*No Impact*

The Proposed Project would not result in any population growth. As such, the Proposed Project would not have a substantial impact on recreational demand related to population growth. Although the Proposed Project would remove the existing onsite handball court, the Proposed Project includes replacement onsite recreational facilities (i.e., a new basketball court and a new multipurpose court in the proposed kitchen/multipurpose building). Since the Proposed Project includes these onsite recreational facilities and would not alter the long-term population, it is unlikely that the Proposed Project would not substantially increase the demand for, or result in accelerated deterioration of, recreational facilities. Therefore, the Proposed Project would have **no impact**.

b. Creation of new or alter existing recreational facilities—*Less than Significant*

The Proposed Project involves the remodeling, reconstructing, and operation of an existing facility, including the removal of an onsite handball court and the construction of onsite recreational facilities, as discussed in 3.15.3(a) above. These new facilities would be available to CCC staff and corpsmembers only and not available to the general public. The potential impacts of these facilities have been analyzed in this IS/MND. In general, the Proposed Project would have beneficial impacts on onsite recreational facilities upon completion of the Proposed Project.

The Proposed Project would not result in any other new or altered recreational facilities. Access to the Placer Nature Center may be somewhat compromised during the two-year construction period by additional traffic on the access road during weekday afternoons as both construction workers and school buses potentially leave the premises, but workers are likely to arrive to the construction site well before the first students arrive at 9am. While construction traffic may periodically delay access to/from the Placer Nature Center site on weekdays, these temporary delays would not require the creation of any new recreational facilities or alterations to existing facilities. Weekend use of the Placer Nature Center will not be inconvenienced by construction because work generally will not be occurring on those days; however, weekend work may be required on an emergency or limited basis. Overall, existing recreational sites would not be affected by the Proposed Project. Therefore, the impact would be **less than significant.**

3.16 Transportation/Traffic

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e. Result in inadequate emergency access?	☐	☒	☐	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.16.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies related to transportation and traffic are applicable to the Proposed Project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. The state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

The Placer County Transportation Planning Agency (PCTPA) is the decision-making body for the regional transportation system in Placer County. The PCTPA works with local jurisdictions and regulatory agencies to develop plans, strategies, and programs to improve regional transportation systems.

The Traffic Circulation Element of the Auburn/Bowman Community Plan (1999) contains a number of goals and policies related to transportation and traffic, including provision of safe and efficient transportation systems, encouragement of public transit and alternative modes of transportation, and minimization of the number of driveway encroachments along public roadways. The Traffic Circulation Element does not appear to address construction-related impacts on transportation and traffic. The Placer County General Plan (2013) contains similar and additional transportation and traffic goals and policies as the Auburn/Bowman Community Plan.

3.16.2 Environmental Setting

The project site is at the Placer Center at 3710 Christian Valley Road in Auburn, Placer County, California, at the terminus of Christian Valley Road. Christian Valley Road is a two-lane county road that connects to Interstate 80 (I-80), 4.1 miles to south. The project site can be accessed from SR 49, 2.9 miles east, via country lanes (i.e., single-line of traffic), Florence Lane to Helen Lane, then two-lane county roads, Virginia Drive to Stanley Drive, until reaching Christian Valley Road 0.5 mile south of the project site. Several minor county roads branch off of Christian Valley Road providing access for neighboring residential properties. Near the terminus of Christian Valley Road, Iron Mine Road, an unimproved gravel road, forks to the east allowing vehicle access to less than a dozen residential properties.

All of the approaching country lanes and county roads incorporate narrow shoulders and lack sidewalks and/or bicycle paths.

Traffic Volumes

According to the most recently collected (2013) traffic count data, eastbound traffic on Christian Valley Road was 1,516 per day and westbound traffic was approximately 1,420 per day (Placer County 2014b). Daily traffic volumes on Stanley Drive were substantially lower (approximately 450-550 trips per day in each direction). No traffic data was available for Florence or Helen lanes, or Virginia Drive.

Public Transit

The project site is not serviced by local municipal or County bus lines. The nearest pickup location is at SR 49 and Dry Creek Road, 1.5 miles south of the intersection of Florence Lane at SR 49.

Designated County Bicycle Routes

The PCTPA developed goals to support alternative modes of transportation within the County. Bicycling is one such mode that the PCTPA recognizes as a means for both transportation and recreational purposes, while helping improve air quality, reduce traffic congestion, and promote a healthy lifestyle. PCTPA monitors bicycle planning efforts throughout the Placer region and also coordinates with the Sacramento Area Council of Governments (SACOG), Caltrans, and other local jurisdictions on bicycle issues (PCTPA 2011). The PCTPA has compiled frequently used and/or dedicated bicycle pathways to provide maps detailing County-wide routes. In addition to the existing PCTPA bicycle path map, the County developed the Regional Bikeway Plan (2002) to improve selected routes by adding dedicated bicycle lanes and expanded road shoulder areas.

Near the project site, Christian Valley Road from I-80 to Stanley Drive, Stanley Drive, and Virginia Drive are identified as "rural routes," which are scenic or rural roads with varying shoulder widths and challenging climbs (PCTPA 2011). Rural routes provide cyclists with increased privileges and the road is shared with potentially high speed vehicle traffic. Christian Valley Road, Stanley Drive, and Virginia Drive are not included in the Placer County Regional Bikeway Plan (2002) as roads that will undergo bicycle lane improvements.

3.16.3 Discussion of Checklist Responses

a. Conflict with applicable circulation plans, ordinances, or policies and applicable congestion management programs—*Less than Significant with Mitigation*

During the Proposed Project's construction period, traffic impacts on Christian Valley Road would be related to the transport of construction equipment and materials to the site, removal of demolished materials, importing of soils, and construction worker trips. Project construction would result in a temporary increase in vehicle traffic along Christian Valley Road to I-80, primarily during the demolition and site preparation phases. Based on the scale of the facility, it has been assumed that up to approximately 26 construction workers would commute to the site daily over the course of the construction period, though the number of workers on-site would vary by construction phase. According to the air quality model's default assumptions, the majority of trips would likely occur during the site preparation phase, which would result in approximately 350 one-way total hauling-related trips, and approximately 18 daily construction commute trips (for 9 workers over the course of approximately 5 days). A maximum total of approximately 158 round trips would occur on a given construction work day.

Project-related truck traffic and incoming/outgoing equipment could increase conflicts between cars and residents using Christian Valley Road. Implementation of **Mitigation**

Measure HAZ-4, which requires development and implementation of a construction traffic management plan, would decrease potential traffic safety hazards during construction. Based on the minimal amount of traffic (approximately 5 percent of the Christian Valley Road volume) added to the roads and with implementation of this mitigation measure, potential conflicts with area residents, circulation plans, ordinances, or policies and applicable congestion management programs would be **less than significant with mitigation**.

b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways—*Less than Significant with Mitigation*

See discussion of a. above. Implementation of **Mitigation Measure HAZ-4**, which requires development and implementation of a construction traffic management plan, would ensure the Proposed Project would not conflict with an applicable congestion management program. This impact would be **less than significant with mitigation**.

c. Change in air traffic patterns—*No Impact*

Construction or operation of the Proposed Project would not interfere with any private or commercial airport or air traffic pattern and would have **no impact**.

d. Increased hazards due to design features—*Less than Significant*

The Proposed Project would not require changes to any road configurations that could create sharp curves or dangerous intersections. For discussion regarding potential safety hazards during construction (e.g., resulting from the presence of slow-moving trucks and equipment on project site roadways), refer to the items previously discussed in 3.8.3(a), (b), and (g). The Project would be designed such that all access roads, driveways, and parking areas are accessible to emergency service vehicles. This impact would be **less than significant**.

e. Inadequate emergency access—*Less than Significant with Mitigation*

During project construction, access along Christian Valley Road could be restricted by the presence of slow-moving trucks. As discussed under checklist criteria 3.8.3(a), (b), and (g) and implementation of **Mitigation Measure HAZ-4**, the construction contractor would have to identify construction haul routes that minimize traffic on nearby roads. Implementation of this measure would reduce construction-related impacts on emergency access to a less-than-significant level. During operations, the Proposed Project would not generate more traffic than currently exists. For these reasons, the Project would not be expected to result in inadequate emergency access and, even with increased activity, any impacts of project operation would be **less than significant with mitigation**.

f. Conflict with alternative transportation policies, plans, or programs—*No Impact*

The project site is located in a rural area with no local or county transit lines servicing the surrounding area, nor are there any known plans of future coverage. The Proposed Project would not modify or conflict with any alternative transportation policies, plans, or programs and would have **no impact**.

3.17 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Exceed wastewater treatment requirements of the applicable RWQCB?	☐	☐	☒	☐
b. Require or result in the construction of new water or wastewater treatment facilities or an expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c. Require or result in the construction of new stormwater drainage facilities or an expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☒	☐
e. Result in a determination by the wastewater treatment provider that serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f. Be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
h. Encourage activities that resulted in the use of substantial amounts of fuel or energy, or used these resources in a wasteful manner?	☐	☐	☒	☐

3.17.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy-efficient technologies (USEPA 2016b). The act also increases the amount of biofuel that must be mixed with gasoline sold in the U.S. (USEPA 2016b).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by the year 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per capita disposal rates are used to determine if a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every two 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 2015). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015).

Title 24 – Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the CBC are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The standards are updated on an approximately three-year cycle. The 2013 standards went into effect on July 1, 2014.

Local Laws, Regulations, and Policies

The Auburn/Bowman Community Plan (1999) contains goals and policies to ensure adequate quality and quantity of water is delivered to residents, and that adequate sewer and

other services are provided to residents. The Placer County General Plan (2013) is generally in line with the Auburn/Bowman Community Plan and contains similar goals and policies. One policy of note in the Placer County General Plan is for utilities to be installed underground to minimize visual impacts (Policy 1.K.5).

Other Standards and Guidelines

Leadership in Energy & Environmental Design

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC), which recognizes energy-efficient and/or environmentally friendly (green) components of building design (USGBC 2015). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design (USGBC 2015). The four levels of LEED certification are related to the number of points a project earns: (1) certified (40-49 points); (2) silver (50-59 points); (3) gold (60-79 points); and (4) platinum (80+ points) (USGBC 2016).

Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20 percent from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC 2015). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum two-year establishment, or by reducing the project's landscape water requirement by at least 30 percent from the calculated baseline for the site's peak watering month (USGBC 2015). Construction and demolition waste management points may be obtained by diverting at least 50 percent of construction and demolition material and three material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC 2015). CCC, as a state agency, is required at a minimum to meet LEED silver requirement for new facilities (EO S-20-04).

3.17.2 Environmental Setting

Water

Christian Valley Park Community Service District (CVPCSD) provides potable water to area residents and the project site, and has jurisdiction over local water infrastructure and maintenance. The CVPCSD's primary water source is Sierra snowmelt from the Yuba and Bear River watersheds via Lake Spaulding and the Drum Forebay Reservoir (CVPCSD 2015). Water is conveyed through natural water courses and canals where it is then treated at the Christian Valley water treatment plant. NID supplies non-potable water via a canal to an existing onsite water tank for onsite irrigation and, as necessary firefighting, purposes. NID's service area encompasses 287,000 acres, of which 66,500 acres are within Placer County (NID 2011). NID raw water supply derives from Sierra snowmelt from the Bear River and Lake Combie. The average annual water supply during a normal water year is projected to be 410,828 acre feet per year (NID 2011). NID currently maintains a surplus of resources from year to year. Based

on projected increases in service population and usage, by the year 2035, service demands will total 203,536 acre feet per year on average (NID 2011).

Sewer

Placer County provides sanitary sewer service to the project site. The sewer lines are under the jurisdiction of Placer County Sewer Maintenance District No. 1 (SMD 1). Two 6-inch polyvinyl chloride (PVC) sanitary sewer lines underlie the existing site and would be relocated to the west of the building. The existing manhole for these lines would be relocated, as well. Approximately 220 linear feet of sewer piping would be replaced and an additional 600 linear feet constructed. A new underground 5,000-gallon grease interceptor would be installed outside of the dining hall building line.

The County has begun construction on the Mid-Western Placer Regional Sewer Project (MWPRSP) (Placer County 2016c). When completed, the MWPRSP would consolidate wastewater from SMD 1 and the City of Lincoln to increase efficiency and lower costs associated with scale, facility operations, compliance with water quality regulations, and to reduce water quality issues on regional surface waters. The MWPRSP includes upgrades to the existing SMD 1 wastewater treatment plant and the City of Lincoln's Wastewater Treatment and Reclamation Facility and construction of new pipelines to convey effluent from SMD 1 to the City of Lincoln's Wastewater Treatment and Reclamation Facility. Upgrades to the City of Lincoln's Wastewater Treatment and Reclamation Facility would be able to accommodate any additional flows originating from SMD 1, as well as serve the future needs of the service area.

Stormwater

Stormwater in the Christian Valley area flows through an informal series of interconnected roadside ditches, constructed earthen drainage ditches, and natural channels. At the project site, the existing stormwater drainage system consists of a drainage ditch parallel to the north side of Iron Mine Road and a constructed channel just east of the existing handball court. No distinguishable drainage patterns are apparent on the western portion of the project site and runoff is assumed to flow overland until reaching Orr Creek or another offsite drainage feature.

Solid Waste

Solid waste generated at the project site is collected by Recology Auburn Placer. The collected waste is transported to a transfer station off of Shale Ridge Road (approximately 2.6 miles south). The transfer station accepts both municipal solid waste and construction debris. Non-recyclable solid waste taken to the transfer station is hauled to the Western Placer Regional Landfill, near SR 54 between the cities of Roseville and Lincoln. The landfill is operated by the Western Placer Waste Management Agency (WPWMA).

Electricity and Natural Gas

The Pacific Gas & Electric Company (PG&E) provides electricity to the project site and surrounding community. PG&E generates electrical power from a multitude of sources including: natural gas/other (27 percent); non-emitting nuclear generation (21 percent);

eligible renewable resources (19 percent) such as wind, geothermal, biomass, solar and small hydro, and large hydroelectric facilities (11 percent); and the remaining portion from unspecified power (21 percent) that is not traceable to specific generation sources by any auditable contract trail (PG&E 2016). There is no centralized system to provide natural gas to the Christian Valley area.

An existing onsite propane tank would continue to be used to supply the Proposed Project. An underground 2-inch natural gas line near the women's dormitory would be relocated (approximately 600 linear feet) and electricity lines would be connected to the project site. In addition, electrical infrastructure (approximately 400 linear feet) would be installed to connect a 3,600 square foot (approximate), ground-mounted photovoltaic panel array to the Proposed Project's buildings. This photovoltaic panel array would be capable of generating approximately 50 kilowatts of electricity and would have a tilt feature. For emergency needs, a diesel generator would be utilized to provide approximately 30 kilowatts for life safety (fire alarm, egress lighting, security) and limited kitchen equipment (primarily freezers and coolers).

3.17.3 Discussion of Checklist Responses

a. Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board—*Less than Significant*

Construction of the Proposed Project would not generate any wastewater requiring treatment by the wastewater treatment plant. Following completion of the Proposed Project, wastewater generated from hand washing, toilet flushing, kitchen use, and other facility operations would be similar to existing volumes generated at the CCC dormitory and kitchen buildings. Wastewater generated by the Proposed Project during operation would be routed to the County's wastewater treatment plant. As described above, the County owns and maintains sewer lines. Placer County SMD 1 maintains sufficient capacity to accommodate wastewater from the Proposed Project. Wastewater generated by the Proposed Project would not contain any toxic or persistent contaminants and would not affect the County's capability to meet the wastewater treatment requirements of the Central Valley RWQCB. This impact would be **less than significant**.

b. Require the construction of new water or wastewater treatment facilities or expansion of existing facilities—*Less than Significant*

The Proposed Project's estimated water demand for indoor use would not significantly differ from current potable water requirements. NID raw water resources would supply the new 300,000-gallon water tank. As discussed above, NID 20-year projections for new and existing customers are far less than available water supplies during a normal precipitation year. Raw water supplied to the project site would be used only for irrigation and firefighting purposes. New landscaping would utilize drought tolerate plants wherever possible. Following the initial filling of the tank, raw water demands would not significantly differ from the existing facility operations.

The Placer County SMD 1 wastewater facilities have sufficient capacity to accommodate the Proposed Project. Additionally, the Proposed Project would have water-efficient fittings and

fixtures, in accordance with LEED standards, and would feature limited and drought-tolerant landscaping. During project construction, it is assumed that water would be supplied by a water truck. The Proposed Project would connect to the existing water main and sewer line. Apart from these onsite connections, no other infrastructure improvements would be necessary. The impact to new water demands and wastewater generation would be **less than significant**.

c. Require the construction of new stormwater drainage facilities or expansion of existing facilities—*Less than Significant*

As described in checklist criterion 3.9.3 (c) above, the area does not employ a dedicated stormwater system. Stormwater runoff flows through natural and constructed channels and drainage ditches until reaching surface waterbodies, e.g., Orr Creek near the project site. The Proposed Project would modify and create a new drainage system of earthen channels and culverts along the southern and eastern portions of the site to capture site stormwater runoff generated onsite from buildings, parking lots, walkways, and other impervious surfaces. In addition, a new bio-retention pond would be constructed on the project site. The new drainage system would reduce the magnitude of stormwater flows, dissipate erosive energy, and provide water quality treatment prior to discharging captured runoff to surface waters downstream. See Section 3.9, *Hydrology and Water Quality*, for additional discussion of stormwater. This impact would be **less than significant**.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources—*Less than Significant*

Construction activities for the Proposed Project would rely on water trucks and on-site ditch water to meet water supply needs (e.g., for dust control, equipment cleaning, and fill conditioning). During the Proposed Project's operation, employees and visitors at the project site would require water for drinking, hand washing, and other related domestic uses. As a state facility, the Proposed Project would be required to obtain LEED Silver certification and would feature water-efficient fittings and fixtures to conserve water. The estimated water demand of the Proposed Project would not differ significantly from current demands given that the quantity of CCC personnel at the site would not change from the existing CCC operations. As such, sufficient water supplies are available to serve the Proposed Project from existing entitlements and resources. This impact would be **less than significant**.

e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments—*Less than Significant*

See discussion b. and d. above. This impact would be **less than significant.**

f. Comply with all applicable regulations related to solid waste and have available landfill capacity to accommodate the project's solid waste disposal needs—*Less than Significant*

The Proposed Project would generate some construction debris through the demolition of existing structures and foundation excavation. During operation of the Proposed Project, typical domestic solid waste (e.g., domestic trash) and hazardous wastes (e.g., fuel, oil, and other automotive fluids) generated from equipment servicing would be comparable to current solid waste generation. The Project would be certified LEED Silver or better and, in accordance with the Integrated Waste Management Act, would seek to divert at least 50 percent of its solid waste. The project site is served by Recology Auburn Placer and solid waste generated by the Proposed Project would be taken to the Recology Auburn Placer Transfer Station on Shale Ridge Road. Any non-recyclable solid waste sent to the transfer station would be hauled to the Western Regional Landfill near the cities of Rocklin and Lincoln. Hazardous waste would be disposed of in accordance with applicable federal, state and local regulations. Both the transfer station and Western Placer Regional Landfill have sufficient capacity remaining to serve the Proposed Project (Recology Auburn Placer 2016; WPWMA 2016). This impact would be **less than significant**.

g. Comply with federal, state, and local statutes and regulations related to solid waste? —*Less than Significant*

See discussion of f. above. This impact would be **less than significant**.

h. Encourage activities that resulted in the use of substantial amounts of fuel or energy, or use these resources in a wasteful manner—*Less than Significant*

The Proposed Project would not use substantial amounts of fuel or energy, or use these resources in a wasteful manner. During construction activities, approximately 75 percent of demolition materials would be recycled. To minimize operation-related energy use, the facilities would be state-of-the-art and LEED certified, and as such would be much more energy efficient than the existing facilities. This impact would be **less than significant**.

3.18 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the Project have the potential to 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. Adverse change in California History and Prehistory resources	☐	☒	☐	☐
c. 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.)	☐	☒	☐	☐
d. Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.18.1 Discussion of Checklist Responses

a. Effects on Environmental Quality, Fish or Wildlife, and Historic Resources—*Less than Significant with Mitigation*

Wildlife Habitat and Populations; Rare and Endangered Species

During desktop and field surveys, no special-status species occurrences were observed on or near the project site. In addition, a site assessment determined that the project site exhibits a low probability for supporting special-status species. As described in Section 3.4, *Biological Resources*, the undeveloped areas of the project site are primarily characterized by mixed foothill woodlands, non-native annual grasses, ruderal vegetation, and denuded (i.e., paved and gravel roads, bare ground and concrete slabs) locations. The ruderal and ornamental vegetation on the site, combined with extensive human activity, makes the presence of rare or endangered species unlikely. While no signs of nesting bird activity were observed during

the field survey conducted for the Proposed Project, suitable nesting and foraging habitat for passerine and raptor species protected under the MBTA were observed. Project construction activities could potentially impact these birds or their nests if they were to be present during ground disturbance activities, which would constitute a significant impact. To avoid such a scenario, the Proposed Project would implement **Mitigation Measure BIO-1**, as described in Section 3.4, *Biological Resources*, which would require that either the Proposed Project's construction activities occur outside of the nesting bird season or nesting bird surveys are conducted by a qualified biologist prior to construction activities. With implementation of **Mitigation Measure BIO-1**, and given the lack of suitable habitat or nearby populations or known occurrences of rare or endangered wildlife species, the Proposed Project would be unlikely to adversely affect wildlife populations. Operations at the Placer Center following Project construction would be similar to existing conditions and would not be anticipated to pose elevated risk of harm to biological resources. Therefore, this impact would be **less than significant with mitigation.**

b. Adverse change in California History and Prehistory resources

As described in Section 3.5, *Cultural Resources*, no historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, have been identified within the project site. Likewise, no archaeological resources, as defined in Section 15064.5 of the State CEQA Guidelines, have been identified within the APE; however, it is possible there are buried archaeological resources within the project site, which could be encountered during site preparation/excavation activities. The cultural resources analysis for this project noted there may be heightened potential for buried archaeological resources on the project site given observations of historic-era materials on the property by CCC staff and the location of a lithic tool scatter and an unmortared rock foundation approximately a 0.45 mile southwest of the project site. Although no TCRs have been definitively identified at the project site, the location has been recorded as archaeological site CA-PLA-120, it is identified by the Maidu name *dape pakan*, and oral histories recount that the area was used by the Maidu in the late 1800s and early 1900s. Additional ethnographic research may determine that the location is a TCR pursuant to Public Resources Code Section21074.

If archaeological resources were accidentally discovered during project construction, a significant impact could potentially result if their character or integrity were damaged in some way to render them ineligible for listing. However, implementation of **Mitigation Measures CR-1 and CR-2** would reduce the potential for impacts to buried archaeological resources. **Mitigation Measure CR-1** would require construction crews to undergo archaeological sensitivity training prior to construction activities and for a qualified archaeological monitor to monitor all ground disturbing activities. **Mitigation Measure CR-2** would require preparation of an Unanticipated Discoveries Plan, for construction work to immediately halt, and for cultural resources to be evaluated if cultural resources should be discovered during construction activities. Similar mitigation measures (**Mitigation Measures CR-3 and CR-4**) are prescribed for possible buried paleontological resources and human remains. With implementation of these mitigation measures, potential impacts on California history and prehistory from the Proposed Project would not be anticipated to be significant. This impact would be **less than significant with mitigation.**

c. Cumulative Impacts—*Less than Significant with Mitigation*

As described in various sections of this IS/MND, the project site is generally rural residential in nature with low-density residential development interspersed with forested areas and open space. In general, future development in Placer County would be expected to occur consistent with the applicable General Plan, specific plans, and related environmental documentation. Development in the vicinity of the Proposed Project is expected to be minimal. The land in the Project vicinity is primarily designated for low-density rural residential and agricultural uses.

Table MAND-1 lists past, current, and probable future projects in the Proposed Project vicinity identified during preparation of this IS/MND. The geographic scope used in the search for past, current, and probable future projects was limited to the relatively near vicinity (i.e., within roughly 4 miles). This was because the Proposed Project's environmental impacts have been determined to be relatively minor and primarily locally concentrated. With the exception of air quality and greenhouse gas emissions, the Proposed Project would not have any regional impacts, and, as described below, the Proposed Project's air quality impacts would not be cumulatively considerable.

Table MAND-1. List of Reasonably Foreseeable Future Projects that May Cumulatively Affect Resources of Concern for the Proposed Project

Project Title	Approximate Distance from Project Site	Brief Description
CCC Placer Center Energy Upgrades	Same site	This project may involve the implementation of additional solar panels on the existing CCC Placer Center buildings and/or the addition of a new diesel backup generator for the Proposed Project's dormitory building.
Lower McElroy Shaded Fuel Break	0.5 mile northwest	This project involves the creation of a 12-acre shaded fuelbreak in the McElroy Road area, in Placer County, CA. The project occurs in conifer/hardwood forest and chaparral located from 1,500-1,800 feet in elevation. The project site occurs in ridge top locations, and contains gentle to moderate slopes ranging from 0-45 percent. The fuel break portion of the project will involve the mastication or chipping of understory brush and trees 10 inches diameter at breast height (dbh) or less in order to increase the probability of success for fire suppression activities (CEQAnet 2015).
Haines Road over Wise Canal Bridge Replacement	2.9 miles southeast	The existing bridge over the Wise Canal, located in the Bowman area of Placer County, is functionally obsolete because it only accommodates one lane of traffic on a two-lane road. Furthermore, the bridge was constructed in 1930 and is beyond its design life. This bridge replacement project will bring the structure into compliance with current structural and roadway geometric guidelines (Placer County 2015c).

Project Title	Approximate Distance from Project Site	Brief Description
State Route 49 Pedestrian Facilities and Landscaping	3.35 miles southwest	This project will construct sidewalk, curb and gutter, and landscape facilities along SR 49 from New Airport Road to Education Street. The proposed facilities will enhance pedestrian access to an existing commercial area, promote walking, and potentially reduce vehicle traffic. The sidewalks are only planned on the east side of SR 49. A separate project will build sidewalks on the west side of the highway in this area (Placer County 2015c).
Bowman Road Overhead Bridge Rehabilitation	3.5 miles south	This bridge, located in the Bowman area of Placer County, has been rated structurally deficient by Caltrans. This project will rehabilitate and widen the bridge deck as well as strengthen the piers and abutments for earthquake loads (Placer County 2015c).
Placer County Bridge Inspection and Maintenance Program	N/A, County-wide	The Placer County Public Works Department (PCPWD) maintains over 100 major bridges across the county which require routine inspection, maintenance, and preventative maintenance program activities to ensure these facilities operate safely and to extend their longevity and performance life. This project includes many of these bridge-related projects (Placer County 2015c).
Placer County Road Inspection and Maintenance Program	N/A, County-wide	PCPWD maintains over 1,000 miles of roads across the county, which require routine inspection and maintenance activities, such as sealing and overlays to ensure their performance and longevity is maximized. This program captures several small projects in one program (Placer County 2015c).
Placer County Road Safety Improvements	N/A, County-wide	PCPWD routinely inspects over 1,000 miles of roads across the county, as well as monitors the frequency of accidents. Based on these efforts, PCPWD designs and implements safety improvements on a regular basis at identified locations, including elements such as signage, striping, traffic calming devices, pavement markers, and high friction devices. This program captures several small projects in one program (Placer County 2015c).

No past projects were identified which would have the potential to cause future cumulative impacts not represented by existing conditions. In general, for the purposes of this analysis, it is assumed that existing baseline conditions are indicative of past and current projects; as such, the cumulative impacts analysis is limited to the potential contribution of the Proposed Project to cumulative environmental impacts in combination with planned and reasonably foreseeable future projects. In addition to the specific projects identified in Table MAND-1, it is assumed that future projects and development in the area would follow the assumptions and projections used in the Placer County General Plan and the Auburn/Bowman Community Plan.

The projects identified in Table MAND-1 would generally have similar effects to the Proposed Project. Construction of these projects could adversely affect air quality, biological resources, greenhouse gas emissions, hydrology and water quality, noise, and traffic. Like the Proposed Project, however, the effects of these projects would primarily be temporary. None of the

projects identified in the planned projects search would be anticipated to substantially increase population or vehicle trips, or otherwise induce; many of the projects appear to involve replacement of existing bridges and road segments, rather than construction of new or expanded infrastructure or residential housing.

The Proposed Project would contribute some amount to existing air quality issues in the air basin. As discussed in Section 3.3, *Air Quality*, the Sacramento Valley air basin is designated as nonattainment for federal and state O_3 standards and a state particulate matter (PM_{10}) standard. Construction of the Proposed Project would result in emissions of ozone precursors (ROG and NO_x) and PM_{10} from operation of construction equipment, and would potentially generate fugitive dust. However, with implementation of **Mitigation Measures AQ-1 through AQ-4**, the Proposed Project's estimated emissions would be below established significance thresholds, including cumulative significance thresholds, and the Proposed Project would be consistent with applicable air basin's management plans for these pollutants. As such, the Proposed Project's contribution to any existing air quality issues in the Sacramento Valley air basin would not be cumulatively considerable. Similarly, the Proposed Project would contribute some amount of greenhouse gas emissions to existing global issues of climate change. However, as detailed in Section 3.7.3, the Proposed Project's construction- and operation-related GHG emissions would be well below the recommended bright-line threshold, which is also considered the appropriate threshold for evaluation of cumulative impacts since GHG is largely a cumulative issue, and would not conflict with AB 32 and the local general plans. Thus, the Proposed Project's contribution to GHG impacts would not be cumulatively considerable.

As described in the respective sections of this IS/MND, potential environmental impacts of the Proposed Project would be avoided or minimized through the implementation of appropriate mitigation measures. Significant cumulative impacts to biological resources would be avoided or minimized with implementation of **Mitigation Measure BIO-1**; cultural resources through **Mitigation Measures CR-1, CR-2, CR-3, and CR-4** (see discussion of 3.18[b] above); hazards and traffic through **Mitigation Measure HAZ-4**; hydrology and water quality through NPDES permit compliance and **Mitigation Measure GEO-1**; and noise through **Mitigation Measures NOI-1, NOI-2, and HAZ-3**. As such, the Proposed Project's contribution to cumulative impacts on these resources would not be anticipated to be cumulatively considerable. This impact would be **less than significant with mitigation.**

d. Effects on Human Beings—Less than Significant with Mitigation

As described in Section 3.8, *Hazards and Hazardous Materials*, the Proposed Project would not be anticipated to cause any substantial adverse effects on human beings. There would be some potential during project construction for accidental spills of hazardous materials, such as fuels, lubricating fluids, and solvents, but compliance with applicable federal, state, and local regulations pertaining to the storage, use, transport, and disposal of such hazardous materials would reduce the potential for spills and adverse impacts. Given past use of a portion of the site for wastewater treatment, there would also be the potential to encounter contaminated soil during excavation activities in this portion of the project site, which could potentially pose a hazard to construction workers or the public. However, **Mitigation Measure HAZ-2** would be implemented, which would require performance of a Phase II ESA for this potentially contaminated area prior to final project design and development of any necessary or appropriate avoidance and mitigation measures. With implementation of this

mitigation measure, construction of the Proposed Project would not be anticipated to result in adverse effects on human beings associated with contaminated soil. During project operation, the possible addition of an AST for storage of diesel fuel for the proposed water tank pump could potentially pose a hazard to human beings if it were to rupture or leak. However, compliance with applicable laws and regulations, including design and implementation of secondary containment for the tank and development of an emergency response plan (part of the Hazardous Material Business Plan requirements), would be anticipated to reduce this potential impact to a level of less than significant. Overall, this impact would be **less than significant with mitigation.**

Chapter 4
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Starkey, Anna M., Archaeologist, AECOM. 2015. Personal communication with Janis Offermann of Horizon Water and Environment via telephone on December 3, 2015, regarding the presence of observed archaeological materials on the Placer Center property.

Ryan, Sean, Captain, CAL FIRE. 2016. Personal communication with Patrick Donaldson of Horizon Water and Environment via telephone on January 20, 2016, regarding fire service in Christian Valley area.

Appendix A

Air Quality and Greenhouse Gas Appendix

Unmitigated

Blasting Emission Estimates - CCC Placer Center

EF is based on emission factors from U.S. EPA AP 42, Section 11.9 Western Surface Coal Mining, Table 11.9-1 (EPA 1998).

	Emission Factor Equation	Scaling Factor for PM10	Scaling Factor for PM2.5
Blasting	0.000014(A)^1.5	0.52	0.03

where A = horizontal area (sq ft), with blasting depth less than or equal to 70 ft.

Use Project Area to calculate Emission Factor then multiply that by the two scaling factors to obtain PM10 and PM2.5 concentration estimates in pounds per blast.

	Total Developed Project Area (A), acres	Total Developed Project Area (A), sq ft	Particulate Matter Emissions (lbs/1 blast)
PM10	3.5	152460	433.4
PM10	2	87120	187.2
PM10	1	43560	66.2
PM10	0.5	21780	23.4
	Area, acres	**Area, sq ft**	**PM Emissions**
PM2.5	3.5	152460	25.0
PM2.5	2	87120	10.8
PM2.5	1	43560	3.8
PM2.5	0.5	21780	1.4

CCC Placer Center Kitchen/Dorm Replacement Project

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.00	1000sqft	0.26	12,000.00	0
Unrefrigerated Warehouse-No Rail	0.40	1000sqft	0.01	400.00	0
User Defined Industrial	1.00	User Defined Unit	0.08	0.00	0
Other Asphalt Surfaces	6.30	1000sqft	0.14	6,300.00	0
Other Non-Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	0.64	Acre	0.64	27,878.40	0
Parking Lot	44.50	1000sqft	1.02	44,500.00	0
Apartments Low Rise	21.00	Dwelling Unit	1.31	19,000.00	60

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Residential 19,000 sqft from P.D, dwelling unit is approx. UnRef. warehouse is water tank bldg. Other non-asphalt surfaces (0.64 acres) is approx. includes concrete walkways and gravel path, based on total of 3.5 acres. User industrial is solar panels.

Construction Phase -

Off-road Equipment - Other general industrial equipment represents potential impact hammer on a backhoe.

Trips and VMT -

Demolition - Demolition area includes removal of existing paving and structures (38,500 sq ft) plus an approximate area of 1075 sqft for the existing water tank.

Grading -

Architectural Coating -

Vehicle Trips - Assume no trips associated with the operation of the project because it is replacing existing uses, and no change in occupancy.

Woodstoves - no hearths/fireplaces at site but 1 pizza woodstove

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation -

Energy Mitigation - Onsite solar panels will generate 50 kW of renewable energy.

Operational Off-Road Equipment - Assumed default for diesel water tank pump. Assumed 450 hp emergency generator

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	11.55	0.00
tblFireplaces	NumberNoFireplace	2.10	0.00
tblFireplaces	NumberWood	7.35	0.00
tblGrading	MaterialImported	0.00	2,800.00
tblLandUse	LandUseSquareFeet	21,000.00	19,000.00
tblLandUse	LotAcreage	0.28	0.26
tblLandUse	LotAcreage	0.00	0.08

tblOffRoadEquipment	HorsePower	87.00	167.00
tblOffRoadEquipment	LoadFactor	0.34	0.40
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	20.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	450.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	2.59	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	2.59	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	2.59	0.00
tblWoodstoves	NumberCatalytic	1.05	0.00
tblWoodstoves	NumberConventional	0.00	1.00
tblWoodstoves	NumberNoncatalytic	1.05	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4689	3.9749	3.2665	5.1900e-003	0.1834	0.2434	0.4268	0.0661	0.2281	0.2942	0.0000	450.1012	450.1012	0.0870	0.0000	451.9284
2018	0.8931	0.1854	0.1734	2.9000e-004	4.5300e-003	0.0111	0.0156	1.2100e-003	0.0104	0.0116	0.0000	24.9226	24.9226	5.8000e-003	0.0000	25.0445
Total	**1.3620**	**4.1604**	**3.4398**	**5.4800e-003**	**0.1879**	**0.2545**	**0.4424**	**0.0673**	**0.2385**	**0.3058**	**0.0000**	**475.0238**	**475.0238**	**0.0928**	**0.0000**	**476.9728**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4689	3.9749	3.2665	5.1900e-003	0.1834	0.2434	0.4268	0.0661	0.2281	0.2942	0.0000	450.1008	450.1008	0.0870	0.0000	451.9280
2018	0.8931	0.1854	0.1734	2.9000e-004	4.5300e-003	0.0111	0.0156	1.2100e-003	0.0104	0.0116	0.0000	24.9226	24.9226	5.8000e-003	0.0000	25.0444
Total	**1.3620**	**4.1603**	**3.4398**	**5.4800e-003**	**0.1879**	**0.2545**	**0.4424**	**0.0673**	**0.2385**	**0.3058**	**0.0000**	**475.0234**	**475.0234**	**0.0928**	**0.0000**	**476.9724**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Energy	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	100.5506	100.5506	3.8600e-003	1.1800e-003	100.9968
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0626	0.5135	0.4990	8.9000e-004		0.0314	0.0314		0.0314	0.0314	0.0000	77.2618	77.2618	5.0300e-003	0.0000	77.3675
Waste						0.0000	0.0000		0.0000	0.0000	4.3034	0.0000	4.3034	0.2543	0.0000	9.6442
Water						0.0000	0.0000		0.0000	0.0000	1.1401	7.8659	9.0060	0.1175	2.8400e-003	12.3524
Total	**0.6334**	**0.5409**	**0.8448**	**1.3500e-003**	**0.0000**	**0.0572**	**0.0572**	**0.0000**	**0.0572**	**0.0572**	**7.4648**	**185.9343**	**193.3991**	**0.4015**	**4.0200e-003**	**203.0749**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Energy	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	77.3202	77.3202	2.8100e-003	9.6000e-004	77.6769
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0626	0.5135	0.4990	8.9000e-004		0.0314	0.0314		0.0314	0.0314	0.0000	77.2618	77.2618	5.0300e-003	0.0000	77.3675
Waste						0.0000	0.0000		0.0000	0.0000	4.3034	0.0000	4.3034	0.2543	0.0000	9.6442
Water						0.0000	0.0000		0.0000	0.0000	1.1401	7.8659	9.0060	0.1174	2.8300e-003	12.3506
Total	**0.6334**	**0.5409**	**0.8448**	**1.3500e-003**	**0.0000**	**0.0572**	**0.0572**	**0.0000**	**0.0572**	**0.0572**	**7.4648**	**162.7038**	**170.1687**	**0.4004**	**3.7900e-003**	**179.7532**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.88**	**94.94**	**59.07**	**65.93**	**0.00**	**54.88**	**54.88**	**0.00**	**54.88**	**54.88**	**0.00**	**54.05**	**51.96**	**1.52**	**5.72**	**49.58**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 38,475; Residential Outdoor: 12,825; Non-Residential Indoor: 74,270; Non-Residential Outdoor: 24,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Other General Industrial Equipment	1	8.00	167	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	180.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	350.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0195**	**0.0213**	**0.0407**	**2.9500e-003**	**0.0198**	**0.0228**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9800e-003	0.0223	0.0213	7.0000e-005	1.5100e-003	3.2000e-004	1.8300e-003	4.2000e-004	3.0000e-004	7.1000e-004	0.0000	6.0495	6.0495	4.0000e-005	0.0000	6.0504
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	8.0000e-004	7.9700e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5321	1.5321	7.0000e-005	0.0000	1.5336
Total	**2.4700e-003**	**0.0231**	**0.0292**	**9.0000e-005**	**3.3400e-003**	**3.3000e-004**	**3.6700e-003**	**9.1000e-004**	**3.1000e-004**	**1.2100e-003**	**0.0000**	**7.5817**	**7.5817**	**1.1000e-004**	**0.0000**	**7.5840**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0195**	**0.0213**	**0.0407**	**2.9500e-003**	**0.0198**	**0.0228**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9800e-003	0.0223	0.0213	7.0000e-005	1.5100e-003	3.2000e-004	1.8300e-003	4.2000e-004	3.0000e-004	7.1000e-004	0.0000	6.0495	6.0495	4.0000e-005	0.0000	6.0504
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	8.0000e-004	7.9700e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5321	1.5321	7.0000e-005	0.0000	1.5336
Total	**2.4700e-003**	**0.0231**	**0.0292**	**9.0000e-005**	**3.3400e-003**	**3.3000e-004**	**3.6700e-003**	**9.1000e-004**	**3.1000e-004**	**1.2100e-003**	**0.0000**	**7.5817**	**7.5817**	**1.1000e-004**	**0.0000**	**7.5840**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0453	0.0000	0.0453	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0453**	**6.8900e-003**	**0.0522**	**0.0249**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0433	0.0414	1.3000e-004	2.9300e-003	6.3000e-004	3.5700e-003	8.1000e-004	5.8000e-004	1.3900e-003	0.0000	11.7630	11.7630	8.0000e-005	0.0000	11.7647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.4000e-004	2.3900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4596	0.4596	2.0000e-005	0.0000	0.4601
Total	**3.9900e-003**	**0.0435**	**0.0438**	**1.4000e-004**	**3.4800e-003**	**6.3000e-004**	**4.1200e-003**	**9.6000e-004**	**5.8000e-004**	**1.5400e-003**	**0.0000**	**12.2226**	**12.2226**	**1.0000e-004**	**0.0000**	**12.2248**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0453	0.0000	0.0453	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0453**	**6.8900e-003**	**0.0522**	**0.0249**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0433	0.0414	1.3000e-004	2.9300e-003	6.3000e-004	3.5700e-003	8.1000e-004	5.8000e-004	1.3900e-003	0.0000	11.7630	11.7630	8.0000e-005	0.0000	11.7647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.4000e-004	2.3900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4596	0.4596	2.0000e-005	0.0000	0.4601
Total	**3.9900e-003**	**0.0435**	**0.0438**	**1.4000e-004**	**3.4800e-003**	**6.3000e-004**	**4.1200e-003**	**9.6000e-004**	**5.8000e-004**	**1.5400e-003**	**0.0000**	**12.2226**	**12.2226**	**1.0000e-004**	**0.0000**	**12.2248**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1653	0.1175	1.4000e-004		9.3300e-003	9.3300e-003		8.5800e-003	8.5800e-003	0.0000	13.1740	13.1740	4.0400e-003	0.0000	13.2588
Total	**0.0159**	**0.1653**	**0.1175**	**1.4000e-004**	**0.0262**	**9.3300e-003**	**0.0355**	**0.0135**	**8.5800e-003**	**0.0221**	**0.0000**	**13.1740**	**13.1740**	**4.0400e-003**	**0.0000**	**13.2588**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.8000e-004	3.8200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7354	0.7354	3.0000e-005	0.0000	0.7361
Total	**2.3000e-004**	**3.8000e-004**	**3.8200e-003**	**1.0000e-005**	**8.8000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7354**	**0.7354**	**3.0000e-005**	**0.0000**	**0.7361**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1653	0.1175	1.4000e-004		9.3300e-003	9.3300e-003		8.5800e-003	8.5800e-003	0.0000	13.1740	13.1740	4.0400e-003	0.0000	13.2588
Total	**0.0159**	**0.1653**	**0.1175**	**1.4000e-004**	**0.0262**	**9.3300e-003**	**0.0355**	**0.0135**	**8.5800e-003**	**0.0221**	**0.0000**	**13.1740**	**13.1740**	**4.0400e-003**	**0.0000**	**13.2588**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.8000e-004	3.8200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7354	0.7354	3.0000e-005	0.0000	0.7361
Total	**2.3000e-004**	**3.8000e-004**	**3.8200e-003**	**1.0000e-005**	**8.8000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7354**	**0.7354**	**3.0000e-005**	**0.0000**	**0.7361**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8088	271.8088	0.0669	0.0000	273.2136
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8088**	**271.8088**	**0.0669**	**0.0000**	**273.2136**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0221	0.1572	0.2576	4.2000e-004	0.0112	2.3600e-003	0.0136	3.2100e-003	2.1700e-003	5.3900e-003	0.0000	37.4383	37.4383	2.9000e-004	0.0000	37.4445
Worker	0.0196	0.0321	0.3195	8.6000e-004	0.0735	4.7000e-004	0.0739	0.0196	4.3000e-004	0.0200	0.0000	61.4433	61.4433	2.7100e-003	0.0000	61.5003
Total	**0.0416**	**0.1893**	**0.5770**	**1.2800e-003**	**0.0846**	**2.8300e-003**	**0.0875**	**0.0228**	**2.6000e-003**	**0.0254**	**0.0000**	**98.8817**	**98.8817**	**3.0000e-003**	**0.0000**	**98.9447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8085	271.8085	0.0669	0.0000	273.2133
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8085**	**271.8085**	**0.0669**	**0.0000**	**273.2133**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0221	0.1572	0.2576	4.2000e-004	0.0112	2.3600e-003	0.0136	3.2100e-003	2.1700e-003	5.3900e-003	0.0000	37.4383	37.4383	2.9000e-004	0.0000	37.4445
Worker	0.0196	0.0321	0.3195	8.6000e-004	0.0735	4.7000e-004	0.0739	0.0196	4.3000e-004	0.0200	0.0000	61.4433	61.4433	2.7100e-003	0.0000	61.5003
Total	**0.0416**	**0.1893**	**0.5770**	**1.2800e-003**	**0.0846**	**2.8300e-003**	**0.0875**	**0.0228**	**2.6000e-003**	**0.0254**	**0.0000**	**98.8817**	**98.8817**	**3.0000e-003**	**0.0000**	**98.9447**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5516	3.5516	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5516**	**3.5516**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	1.8900e-003	3.1700e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.8000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4862	0.4862	0.0000	0.0000	0.4862
Worker	2.2000e-004	3.8000e-004	3.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7812	0.7812	3.0000e-005	0.0000	0.7819
Total	**4.8000e-004**	**2.2700e-003**	**6.9100e-003**	**2.0000e-005**	**1.1200e-003**	**4.0000e-005**	**1.1600e-003**	**3.0000e-004**	**4.0000e-005**	**3.3000e-004**	**0.0000**	**1.2674**	**1.2674**	**3.0000e-005**	**0.0000**	**1.2682**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5515	3.5515	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5515**	**3.5515**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	1.8900e-003	3.1700e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.8000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4862	0.4862	0.0000	0.0000	0.4862
Worker	2.2000e-004	3.8000e-004	3.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7812	0.7812	3.0000e-005	0.0000	0.7819
Total	**4.8000e-004**	**2.2700e-003**	**6.9100e-003**	**2.0000e-005**	**1.1200e-003**	**4.0000e-005**	**1.1600e-003**	**3.0000e-004**	**4.0000e-005**	**3.3000e-004**	**0.0000**	**1.2674**	**1.2674**	**3.0000e-005**	**0.0000**	**1.2682**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	8.6000e-004	8.4600e-003	3.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7688	1.7688	7.0000e-005	0.0000	1.7704
Total	**5.1000e-004**	**8.6000e-004**	**8.4600e-003**	**3.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7688**	**1.7688**	**7.0000e-005**	**0.0000**	**1.7704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	8.6000e-004	8.4600e-003	3.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7688	1.7688	7.0000e-005	0.0000	1.7704
Total	**5.1000e-004**	**8.6000e-004**	**8.4600e-003**	**3.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7688**	**1.7688**	**7.0000e-005**	**0.0000**	**1.7704**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**0.8737**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.7000e-004	4.6500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9729	0.9729	4.0000e-005	0.0000	0.9737
Total	**2.8000e-004**	**4.7000e-004**	**4.6500e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9729**	**0.9729**	**4.0000e-005**	**0.0000**	**0.9737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**0.8737**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.7000e-004	4.6500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9729	0.9729	4.0000e-005	0.0000	0.9737
Total	**2.8000e-004**	**4.7000e-004**	**4.6500e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9729**	**0.9729**	**4.0000e-005**	**0.0000**	**0.9737**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	42.60	21.00	36.40	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.436123	0.064009	0.189752	0.169683	0.063959	0.008608	0.013150	0.039191	0.001722	0.001069	0.008434	0.000534	0.003765

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4183	26.4183	5.1000e-004	4.8000e-004	26.5790
NaturalGas Unmitigated	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4183	26.4183	5.1000e-004	4.8000e-004	26.5790
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	50.9019	50.9019	2.3000e-003	4.8000e-004	51.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	74.1324	74.1324	3.3500e-003	6.9000e-004	74.4177

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	284887	1.5400e-003	0.0131	5.5900e-003	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	15.2027	15.2027	2.9000e-004	2.8000e-004	15.2952
General Office Building	207600	1.1200e-003	0.0102	8.5500e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	11.0783	11.0783	2.1000e-004	2.0000e-004	11.1458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2572	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1373	0.1373	0.0000	0.0000	0.1381
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0234**	**0.0143**	**1.4000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4183**	**26.4183**	**5.0000e-004**	**4.8000e-004**	**26.5790**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	284887	1.5400e-003	0.0131	5.5900e-003	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	15.2027	15.2027	2.9000e-004	2.8000e-004	15.2952
General Office Building	207600	1.1200e-003	0.0102	8.5500e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	11.0783	11.0783	2.1000e-004	2.0000e-004	11.1458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2572	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1373	0.1373	0.0000	0.0000	0.1381
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0234**	**0.0143**	**1.4000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4183**	**26.4183**	**5.0000e-004**	**4.8000e-004**	**26.5790**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	79595.9	23.1554	1.0500e-003	2.2000e-004	23.2445
General Office Building	134040	38.9938	1.7600e-003	3.6000e-004	39.1439
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	39160	11.3921	5.2000e-004	1.1000e-004	11.4360
Unrefrigerated Warehouse-No Rail	2032	0.5911	3.0000e-005	1.0000e-005	0.5934
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**74.1323**	**3.3600e-003**	**7.0000e-004**	**74.4178**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	69614.1	20.2516	9.2000e-004	1.9000e-004	20.3295
General Office Building	124058	36.0900	1.6300e-003	3.4000e-004	36.2289
Other Asphalt Surfaces	-9981.75	-2.9038	-0.0001	0.0000	-2.9150
Other Non-Asphalt Surfaces	-9981.75	-5.8076	-0.0003	-0.0001	-5.8300
Parking Lot	29178.3	8.4883	3.8000e-004	8.0000e-005	8.5210
Unrefrigerated Warehouse-No Rail	-7949.75	-2.3127	-0.0001	0.0000	-2.3216
User Defined Industrial	-9981.75	-2.9038	-0.0001	0.0000	-2.9150
Total		**50.9019**	**2.3100e-003**	**4.8000e-004**	**51.0979**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Unmitigated	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0871					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0400	2.1100e-003	0.1742	3.0000e-004		0.0231	0.0231		0.0231	0.0231	2.0214	0.0000	2.0214	0.0205	0.0000	2.4528
Landscaping	4.8600e-003	1.8200e-003	0.1573	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2559	0.2559	2.5000e-004	0.0000	0.2612
Total	**0.5681**	**3.9300e-003**	**0.3315**	**3.1000e-004**		**0.0240**	**0.0240**		**0.0240**	**0.0240**	**2.0214**	**0.2559**	**2.2773**	**0.0208**	**0.0000**	**2.7140**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0871					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0400	2.1100e-003	0.1742	3.0000e-004		0.0231	0.0231		0.0231	0.0231	2.0214	0.0000	2.0214	0.0205	0.0000	2.4528
Landscaping	4.8600e-003	1.8200e-003	0.1573	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2559	0.2559	2.5000e-004	0.0000	0.2612
Total	**0.5681**	**3.9300e-003**	**0.3315**	**3.1000e-004**		**0.0240**	**0.0240**		**0.0240**	**0.0240**	**2.0214**	**0.2559**	**2.2773**	**0.0208**	**0.0000**	**2.7140**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	9.0060	0.1175	2.8400e-003	12.3524
Mitigated	9.0060	0.1174	2.8300e-003	12.3506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36823 / 0.862583	3.4661	0.0447	1.0800e-003	4.7404
General Office Building	2.1328 / 1.3072	5.3649	0.0697	1.6800e-003	7.3511
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0925 / 0	0.1750	3.0200e-003	7.0000e-005	0.2609
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0060**	**0.1175**	**2.8300e-003**	**12.3524**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36823 / 0.862583	3.4661	0.0447	1.0800e-003	4.7397
General Office Building	2.1328 / 1.3072	5.3649	0.0697	1.6800e-003	7.3500
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0925 / 0	0.1750	3.0200e-003	7.0000e-005	0.2608
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0060**	**0.1174**	**2.8300e-003**	**12.3506**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3034	0.2543	0.0000	9.6442
Unmitigated	4.3034	0.2543	0.0000	9.6442

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	9.66	1.9609	0.1159	0.0000	4.3945
General Office Building	11.16	2.2654	0.1339	0.0000	5.0769
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.38	0.0771	4.5600e-003	0.0000	0.1729
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4.3034**	**0.2543**	**0.0000**	**9.6442**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	9.66	1.9609	0.1159	0.0000	4.3945
General Office Building	11.16	2.2654	0.1339	0.0000	5.0769
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.38	0.0771	4.5600e-003	0.0000	0.1729
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4.3034**	**0.2543**	**0.0000**	**9.6442**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	20	450	0.74	Diesel
Pumps	1	8.00	260	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Generator Sets	1.4600e-003	0.0151	7.4500e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	3.7849	3.7849	1.2000e-004	0.0000	3.7874
Pumps	0.0611	0.4984	0.4916	8.6000e-004		0.0309	0.0309		0.0309	0.0309	0.0000	73.4770	73.4770	4.9100e-003	0.0000	73.5801
Total	**0.0626**	**0.5135**	**0.4990**	**9.0000e-004**		**0.0314**	**0.0314**		**0.0314**	**0.0314**	**0.0000**	**77.2618**	**77.2618**	**5.0300e-003**	**0.0000**	**77.3675**

10.0 Vegetation

CCC Placer Center Kitchen/Dorm Replacement Project

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.00	1000sqft	0.26	12,000.00	0
Unrefrigerated Warehouse-No Rail	0.40	1000sqft	0.01	400.00	0
User Defined Industrial	1.00	User Defined Unit	0.08	0.00	0
Other Asphalt Surfaces	6.30	1000sqft	0.14	6,300.00	0
Other Non-Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	0.64	Acre	0.64	27,878.40	0
Parking Lot	44.50	1000sqft	1.02	44,500.00	0
Apartments Low Rise	21.00	Dwelling Unit	1.31	19,000.00	60

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Residential 19,000 sqft from P.D, dwelling unit is approx. UnRef. warehouse is water tank bldg. Other non-asphalt surfaces (0.64 acres) is approx. includes concrete walkways and gravel path, based on total of 3.5 acres. User industrial is solar panels.

Construction Phase -

Off-road Equipment - Other general industrial equipment represents potential impact hammer on a backhoe.

Trips and VMT -

Demolition - Demolition area includes removal of existing paving and structures (38,500 sq ft) plus an approximate area of 1075 sqft for the existing water tank.

Grading -

Architectural Coating -

Vehicle Trips - Assume no trips associated with the operation of the project because it is replacing existing uses, and no change in occupancy.

Woodstoves - no hearths/fireplaces at site but 1 pizza woodstove

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation -

Energy Mitigation - Onsite solar panels will generate 50 kW of renewable energy.

Operational Off-Road Equipment - Assumed default for diesel water tank pump. Assumed 450 hp emergency generator

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	11.55	0.00
tblFireplaces	NumberNoFireplace	2.10	0.00
tblFireplaces	NumberWood	7.35	0.00
tblGrading	MaterialImported	0.00	2,800.00
tblLandUse	LandUseSquareFeet	21,000.00	19,000.00
tblLandUse	LotAcreage	0.28	0.26
tblLandUse	LotAcreage	0.00	0.08

tblOffRoadEquipment	HorsePower	87.00	167.00
tblOffRoadEquipment	LoadFactor	0.34	0.40
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	20.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	450.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	2.59	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	2.59	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	2.59	0.00
tblWoodstoves	NumberCatalytic	1.05	0.00
tblWoodstoves	NumberConventional	0.00	1.00
tblWoodstoves	NumberNoncatalytic	1.05	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.3158	68.2999	53.6436	0.0943	19.5804	3.0077	22.5881	10.3356	2.7671	13.1027	0.0000	9,418.5492	9,418.5492	1.2711	0.0000	9,445.2422
2018	97.1085	24.6885	21.9861	0.0388	0.7793	1.5169	2.2962	0.2088	1.4256	1.6343	0.0000	3,602.4354	3,602.4354	0.6656	0.0000	3,616.4125
Total	**103.4243**	**92.9884**	**75.6297**	**0.1331**	**20.3597**	**4.5246**	**24.8843**	**10.5444**	**4.1926**	**14.7370**	**0.0000**	**13,020.9846**	**13,020.9846**	**1.9367**	**0.0000**	**13,061.6546**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.3158	68.2999	53.6436	0.0943	19.5804	3.0077	22.5881	10.3356	2.7671	13.1027	0.0000	9,418.5492	9,418.5492	1.2711	0.0000	9,445.2422
2018	97.1085	24.6885	21.9861	0.0388	0.7793	1.5169	2.2962	0.2088	1.4256	1.6343	0.0000	3,602.4354	3,602.4354	0.6656	0.0000	3,616.4125
Total	**103.4243**	**92.9884**	**75.6297**	**0.1331**	**20.3597**	**4.5246**	**24.8843**	**10.5444**	**4.1926**	**14.7370**	**0.0000**	**13,020.9846**	**13,020.9846**	**1.9367**	**0.0000**	**13,061.6546**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Energy	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.6164	5.3432	4.5263	0.0103		0.2834	0.2834		0.2834	0.2834		1,040.2452	1,040.2452	0.0549		1,041.3976
Total	**4.5279**	**5.5434**	**10.6013**	**0.0185**	**0.0000**	**0.8664**	**0.8664**	**0.0000**	**0.8664**	**0.8664**	**54.3456**	**1,202.9472**	**1,257.2928**	**0.6133**	**2.9300e-003**	**1,271.0796**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Energy	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.6164	5.3432	4.5263	0.0103		0.2834	0.2834		0.2834	0.2834		1,040.2452	1,040.2452	0.0549		1,041.3976
Total	**4.5279**	**5.5434**	**10.6013**	**0.0185**	**0.0000**	**0.8664**	**0.8664**	**0.0000**	**0.8664**	**0.8664**	**54.3456**	**1,202.9472**	**1,257.2928**	**0.6133**	**2.9300e-003**	**1,271.0796**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.61**	**96.39**	**42.70**	**55.38**	**0.00**	**32.71**	**32.71**	**0.00**	**32.71**	**32.71**	**0.00**	**86.47**	**82.74**	**8.95**	**0.00**	**81.93**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 38,475; Residential Outdoor: 12,825; Non-Residential Indoor: 74,270; Non-Residential Outdoor: 24,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Other General Industrial Equipment	1	8.00	167	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	180.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	350.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9478	0.0000	1.9478	0.2949	0.0000	0.2949			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.9478**	**2.1252**	**4.0730**	**0.2949**	**1.9797**	**2.2746**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1812	2.1165	1.6900	6.7300e-003	0.1570	0.0324	0.1894	0.0430	0.0298	0.0728		667.5045	667.5045	4.5800e-003		667.6006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0571	0.0708	0.9187	2.3600e-003	0.1916	1.1600e-003	0.1928	0.0508	1.0700e-003	0.0519		186.4681	186.4681	7.4600e-003		186.6247
Total	**0.2383**	**2.1873**	**2.6087**	**9.0900e-003**	**0.3486**	**0.0336**	**0.3821**	**0.0938**	**0.0309**	**0.1247**		**853.9726**	**853.9726**	**0.0120**		**854.2253**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9478	0.0000	1.9478	0.2949	0.0000	0.2949			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.9478**	**2.1252**	**4.0730**	**0.2949**	**1.9797**	**2.2746**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1812	2.1165	1.6900	6.7300e-003	0.1570	0.0324	0.1894	0.0430	0.0298	0.0728		667.5045	667.5045	4.5800e-003		667.6006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0571	0.0708	0.9187	2.3600e-003	0.1916	1.1600e-003	0.1928	0.0508	1.0700e-003	0.0519		186.4681	186.4681	7.4600e-003		186.6247
Total	**0.2383**	**2.1873**	**2.6087**	**9.0900e-003**	**0.3486**	**0.0336**	**0.3821**	**0.0938**	**0.0309**	**0.1247**		**853.9726**	**853.9726**	**0.0120**		**854.2253**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1296	0.0000	18.1296	9.9403	0.0000	9.9403			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.1296**	**2.7542**	**20.8838**	**9.9403**	**2.5339**	**12.4742**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4091	16.4615	13.1441	0.0523	1.2209	0.2521	1.4730	0.3344	0.2319	0.5663		5,191.7016	5,191.7016	0.0356		5,192.4494
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**1.4776**	**16.5465**	**14.2466**	**0.0552**	**1.4508**	**0.2535**	**1.7043**	**0.3953**	**0.2332**	**0.6285**		**5,415.4633**	**5,415.4633**	**0.0446**		**5,416.3990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1296	0.0000	18.1296	9.9403	0.0000	9.9403			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.1296**	**2.7542**	**20.8838**	**9.9403**	**2.5339**	**12.4742**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4091	16.4615	13.1441	0.0523	1.2209	0.2521	1.4730	0.3344	0.2319	0.5663		5,191.7016	5,191.7016	0.0356		5,192.4494
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**1.4776**	**16.5465**	**14.2466**	**0.0552**	**1.4508**	**0.2535**	**1.7043**	**0.3953**	**0.2332**	**0.6285**		**5,415.4633**	**5,415.4633**	**0.0446**		**5,416.3990**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9705	41.3237	29.3861	0.0355		2.3328	2.3328		2.1462	2.1462		3,630.4610	3,630.4610	1.1124		3,653.8207
Total	**3.9705**	**41.3237**	**29.3861**	**0.0355**	**6.5523**	**2.3328**	**8.8851**	**3.3675**	**2.1462**	**5.5137**		**3,630.4610**	**3,630.4610**	**1.1124**		**3,653.8207**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**0.0685**	**0.0850**	**1.1025**	**2.8300e-003**	**0.2299**	**1.4000e-003**	**0.2313**	**0.0610**	**1.2900e-003**	**0.0623**		**223.7617**	**223.7617**	**8.9500e-003**		**223.9496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9705	41.3237	29.3861	0.0355		2.3328	2.3328		2.1462	2.1462	0.0000	3,630.4610	3,630.4610	1.1124		3,653.8207
Total	**3.9705**	**41.3237**	**29.3861**	**0.0355**	**6.5523**	**2.3328**	**8.8851**	**3.3675**	**2.1462**	**5.5137**	**0.0000**	**3,630.4610**	**3,630.4610**	**1.1124**		**3,653.8207**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**0.0685**	**0.0850**	**1.1025**	**2.8300e-003**	**0.2299**	**1.4000e-003**	**0.2313**	**0.0610**	**1.2900e-003**	**0.0623**		**223.7617**	**223.7617**	**8.9500e-003**		**223.9496**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1737	1.3222	1.7110	3.7000e-003	0.1023	0.0207	0.1230	0.0292	0.0190	0.0483		364.8824	364.8824	2.7900e-003		364.9410
Worker	0.2017	0.2502	3.2462	8.3400e-003	0.6770	4.1100e-003	0.6811	0.1795	3.7900e-003	0.1833		658.8540	658.8540	0.0263		659.4072
Total	**0.3754**	**1.5723**	**4.9572**	**0.0120**	**0.7793**	**0.0248**	**0.8041**	**0.2088**	**0.0228**	**0.2316**		**1,023.7364**	**1,023.7364**	**0.0291**		**1,024.3483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1737	1.3222	1.7110	3.7000e-003	0.1023	0.0207	0.1230	0.0292	0.0190	0.0483		364.8824	364.8824	2.7900e-003		364.9410
Worker	0.2017	0.2502	3.2462	8.3400e-003	0.6770	4.1100e-003	0.6811	0.1795	3.7900e-003	0.1833		658.8540	658.8540	0.0263		659.4072
Total	**0.3754**	**1.5723**	**4.9572**	**0.0120**	**0.7793**	**0.0248**	**0.8041**	**0.2088**	**0.0228**	**0.2316**		**1,023.7364**	**1,023.7364**	**0.0291**		**1,024.3483**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1564	1.2034	1.5550	3.6900e-003	0.1023	0.0186	0.1209	0.0292	0.0171	0.0463		358.5243	358.5243	2.6800e-003		358.5806
Worker	0.1775	0.2243	2.8984	8.3400e-003	0.6770	4.0300e-003	0.6810	0.1795	3.7300e-003	0.1833		633.9721	633.9721	0.0242		634.4801
Total	**0.3339**	**1.4276**	**4.4534**	**0.0120**	**0.7793**	**0.0226**	**0.8019**	**0.2088**	**0.0208**	**0.2296**		**992.4964**	**992.4964**	**0.0269**		**993.0608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1564	1.2034	1.5550	3.6900e-003	0.1023	0.0186	0.1209	0.0292	0.0171	0.0463		358.5243	358.5243	2.6800e-003		358.5806
Worker	0.1775	0.2243	2.8984	8.3400e-003	0.6770	4.0300e-003	0.6810	0.1795	3.7300e-003	0.1833		633.9721	633.9721	0.0242		634.4801
Total	**0.3339**	**1.4276**	**4.4534**	**0.0120**	**0.7793**	**0.0226**	**0.8019**	**0.2088**	**0.0208**	**0.2296**		**992.4964**	**992.4964**	**0.0269**		**993.0608**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.1688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5748**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0670	0.0846	1.0937	3.1500e-003	0.2555	1.5200e-003	0.2570	0.0678	1.4100e-003	0.0692		239.2348	239.2348	9.1300e-003		239.4265
Total	**0.0670**	**0.0846**	**1.0937**	**3.1500e-003**	**0.2555**	**1.5200e-003**	**0.2570**	**0.0678**	**1.4100e-003**	**0.0692**		**239.2348**	**239.2348**	**9.1300e-003**		**239.4265**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.1688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5748**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0670	0.0846	1.0937	3.1500e-003	0.2555	1.5200e-003	0.2570	0.0678	1.4100e-003	0.0692		239.2348	239.2348	9.1300e-003		239.4265
Total	**0.0670**	**0.0846**	**1.0937**	**3.1500e-003**	**0.2555**	**1.5200e-003**	**0.2570**	**0.0678**	**1.4100e-003**	**0.0692**		**239.2348**	**239.2348**	**9.1300e-003**		**239.4265**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	96.7730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**97.0716**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0465	0.6016	1.7300e-003	0.1405	8.4000e-004	0.1413	0.0373	7.7000e-004	0.0380		131.5791	131.5791	5.0200e-003		131.6846
Total	**0.0368**	**0.0465**	**0.6016**	**1.7300e-003**	**0.1405**	**8.4000e-004**	**0.1413**	**0.0373**	**7.7000e-004**	**0.0380**		**131.5791**	**131.5791**	**5.0200e-003**		**131.6846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	96.7730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**97.0716**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0465	0.6016	1.7300e-003	0.1405	8.4000e-004	0.1413	0.0373	7.7000e-004	0.0380		131.5791	131.5791	5.0200e-003		131.6846
Total	**0.0368**	**0.0465**	**0.6016**	**1.7300e-003**	**0.1405**	**8.4000e-004**	**0.1413**	**0.0373**	**7.7000e-004**	**0.0380**		**131.5791**	**131.5791**	**5.0200e-003**		**131.6846**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	42.60	21.00	36.40	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.436123	0.064009	0.189752	0.169683	0.063959	0.008608	0.013150	0.039191	0.001722	0.001069	0.008434	0.000534	0.003765

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
NaturalGas Unmitigated	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	780.513	8.4200e-003	0.0719	0.0306	4.6000e-004		5.8200e-003	5.8200e-003		5.8200e-003	5.8200e-003		91.8251	91.8251	1.7600e-003	1.6800e-003	92.3839
General Office Building	568.767	6.1300e-003	0.0558	0.0468	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003		66.9138	66.9138	1.2800e-003	1.2300e-003	67.3210
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	7.04658	8.0000e-005	6.9000e-004	5.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.8290	0.8290	2.0000e-005	2.0000e-005	0.8341
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1284**	**0.0780**	**7.9000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5679**	**159.5679**	**3.0600e-003**	**2.9300e-003**	**160.5390**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.568767	6.1300e-003	0.0558	0.0468	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003		66.9138	66.9138	1.2800e-003	1.2300e-003	67.3210
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.00704658	8.0000e-005	6.9000e-004	5.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.8290	0.8290	2.0000e-005	2.0000e-005	0.8341
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Low Rise	0.780513	8.4200e-003	0.0719	0.0306	4.6000e-004		5.8200e-003	5.8200e-003		5.8200e-003	5.8200e-003		91.8251	91.8251	1.7600e-003	1.6800e-003	92.3839
Total		**0.0146**	**0.1284**	**0.0780**	**7.9000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5679**	**159.5679**	**3.0600e-003**	**2.9300e-003**	**160.5390**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Unmitigated	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.9757	0.0516	4.2490	7.3600e-003		0.5633	0.5633		0.5633	0.5633	54.3456	0.0000	54.3456	0.5523	0.0000	65.9438
Landscaping	0.0540	0.0202	1.7480	9.0000e-005		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		3.1341	3.1341	3.1000e-003		3.1993
Total	**3.8968**	**0.0718**	**5.9969**	**7.4500e-003**		**0.5729**	**0.5729**		**0.5729**	**0.5729**	**54.3456**	**3.1341**	**57.4797**	**0.5554**	**0.0000**	**69.1430**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.9757	0.0516	4.2490	7.3600e-003		0.5633	0.5633		0.5633	0.5633	54.3456	0.0000	54.3456	0.5523	0.0000	65.9438
Landscaping	0.0540	0.0202	1.7480	9.0000e-005		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		3.1341	3.1341	3.1000e-003		3.1993
Total	**3.8968**	**0.0718**	**5.9969**	**7.4500e-003**		**0.5729**	**0.5729**		**0.5729**	**0.5729**	**54.3456**	**3.1341**	**57.4797**	**0.5554**	**0.0000**	**69.1430**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	20	450	0.74	Diesel
Pumps	1	8.00	260	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Generator Sets	0.1461	1.5094	0.7452	3.6700e-003		0.0455	0.0455		0.0455	0.0455		417.2107	417.2107	0.0132		417.4882
Pumps	0.4703	3.8338	3.7812	6.5800e-003		0.2379	0.2379		0.2379	0.2379		623.0346	623.0346	0.0417		623.9094
Total	**0.6164**	**5.3432**	**4.5263**	**0.0103**		**0.2834**	**0.2834**		**0.2834**	**0.2834**		**1,040.2452**	**1,040.2452**	**0.0549**		**1,041.3976**

10.0 Vegetation

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at http://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

79,854 kWh per Year *

System output may range from 78,002 to 81,483kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Energy Value ($)
January	3.38	4,300	605
February	4.37	5,018	707
March	2.36	3,081	434
April	6.85	8,120	1,143
May	7.54	8,940	1,259
June	8.35	9,287	1,308
July	8.23	9,576	1,348
August	7.90	9,221	1,298
September	6.06	6,925	975
October	5.37	6,448	908
November	3.63	4,374	616
December	3.61	4,564	643
Annual	5.64	79,854	$ 11,244

Location and Station Identification

Requested Location	3700 Christian Valley Rd	
Weather Data Source	(TMY3) BLUE CANYON AP, CA	29 mi
Latitude	39.3° N	
Longitude	120.72° W	

PV System Specifications *(Commercial)*

DC System Size	50 kW
Module Type	Standard
Array Type	Fixed (open rack)
Array Tilt	20°
Array Azimuth	180°
System Losses	14%
Inverter Efficiency	96%
DC to AC Size Ratio	1.1

Initial Economic Comparison

Average Cost of Electricity Purchased from Utility	0.14 $/kWh
Initial Cost	2.60 $/Wdc
Cost of Electricity Generated by System	0.10 $/kWh

These values can be compared to get an idea of the cost-effectiveness of this system. However, system costs, system financing options (including 3rd party ownership) and complex utility rates can significantly change the relative value of the PV system.

Mitigated

CCC Placer Center Kitchen/Dorm Replacement Project

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.00	1000sqft	0.26	12,000.00	0
Unrefrigerated Warehouse-No Rail	0.40	1000sqft	0.01	400.00	0
User Defined Industrial	1.00	User Defined Unit	0.08	0.00	0
Other Asphalt Surfaces	6.30	1000sqft	0.14	6,300.00	0
Other Non-Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	0.64	Acre	0.64	27,878.40	0
Parking Lot	44.50	1000sqft	1.02	44,500.00	0
Apartments Low Rise	21.00	Dwelling Unit	1.31	19,000.00	60

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Residential 19,000 sqft from P.D, dwelling unit is approx. UnRef. warehouse is water tank bldg. Other non-asphalt surfaces (0.64 acres) is approx. includes concrete walkways and gravel path, based on total of 3.5 acres. User industrial is solar panels.

Construction Phase -

Off-road Equipment - Other general industrial equipment represents potential impact hammer on a backhoe.

Trips and VMT -

Demolition - Demolition area includes removal of existing paving and structures (38,500 sq ft) plus an approximate area of 1075 sqft for the existing water tank.

Grading -

Architectural Coating - Assume low VOC paint (100 g/L)

Vehicle Trips - Assume no trips associated with the operation of the project because it is replacing existing uses, and no change in occupancy.

Woodstoves - no hearths/fireplaces at site but 1 wood pizza oven

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation - changed VOC paint to 100 g/L

Energy Mitigation - Onsite solar panels will generate 50 kW of renewable energy.

Operational Off-Road Equipment - Assumed default for diesel water tank pump. Assumed 450 hp emergency generator

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	24,757.00	24,457.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	74,270.00	73,370.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	12,825.00	12,083.00
tblArchitecturalCoating	ConstArea_Residential_Interior	38,475.00	36,248.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	11.55	0.00
tblFireplaces	NumberNoFireplace	2.10	0.00
tblFireplaces	NumberWood	7.35	0.00
tblGrading	MaterialImported	0.00	2,800.00
tblLandUse	LandUseSquareFeet	21,000.00	19,000.00
tblLandUse	LotAcreage	0.28	0.26
tblLandUse	LotAcreage	0.00	0.08
tblOffRoadEquipment	HorsePower	87.00	167.00
tblOffRoadEquipment	LoadFactor	0.34	0.40
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	20.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	450.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	2.59	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	0.98	0.00

tblVehicleTrips	SU_TR	2.59	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	2.59	0.00
tblWoodstoves	NumberCatalytic	1.05	0.00
tblWoodstoves	NumberConventional	0.00	1.00
tblWoodstoves	NumberNoncatalytic	1.05	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4689	3.9749	3.2665	5.1900e-003	0.1834	0.2434	0.4268	0.0661	0.2281	0.2942	0.0000	450.1012	450.1012	0.0870	0.0000	451.9284
2018	0.3609	0.1854	0.1734	2.9000e-004	4.5300e-003	0.0111	0.0156	1.2100e-003	0.0104	0.0116	0.0000	24.9226	24.9226	5.8000e-003	0.0000	25.0445
Total	**0.8298**	**4.1604**	**3.4398**	**5.4800e-003**	**0.1879**	**0.2545**	**0.4424**	**0.0673**	**0.2385**	**0.3058**	**0.0000**	**475.0238**	**475.0238**	**0.0928**	**0.0000**	**476.9728**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4689	3.9749	3.2665	5.1900e-003	0.1834	0.2434	0.4268	0.0661	0.2281	0.2942	0.0000	450.1008	450.1008	0.0870	0.0000	451.9280
2018	0.3609	0.1854	0.1734	2.9000e-004	4.5300e-003	0.0111	0.0156	1.2100e-003	0.0104	0.0116	0.0000	24.9226	24.9226	5.8000e-003	0.0000	25.0444
Total	**0.8298**	**4.1603**	**3.4398**	**5.4800e-003**	**0.1879**	**0.2545**	**0.4424**	**0.0673**	**0.2385**	**0.3058**	**0.0000**	**475.0234**	**475.0234**	**0.0928**	**0.0000**	**476.9724**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Energy	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	100.5506	100.5506	3.8600e-003	1.1800e-003	100.9968
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0603	0.4943	0.4801	8.6000e-004		0.0302	0.0302		0.0302	0.0302	0.0000	74.4358	74.4358	4.8400e-003	0.0000	74.5375
Waste						0.0000	0.0000		0.0000	0.0000	4.3034	0.0000	4.3034	0.2543	0.0000	9.6442
Water						0.0000	0.0000		0.0000	0.0000	1.1401	7.8659	9.0060	0.1175	2.8400e-003	12.3524
Total	**0.6310**	**0.5217**	**0.8259**	**1.3200e-003**	**0.0000**	**0.0560**	**0.0560**	**0.0000**	**0.0560**	**0.0560**	**7.4648**	**183.1082**	**190.5731**	**0.4013**	**4.0200e-003**	**200.2449**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5159	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Energy	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	77.3202	77.3202	2.8100e-003	9.6000e-004	77.6769
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0603	0.4943	0.4801	8.6000e-004		0.0302	0.0302		0.0302	0.0302	0.0000	74.4358	74.4358	4.8400e-003	0.0000	74.5375
Waste						0.0000	0.0000		0.0000	0.0000	4.3034	0.0000	4.3034	0.2543	0.0000	9.6442
Water						0.0000	0.0000		0.0000	0.0000	1.1401	7.8659	9.0060	0.1174	2.8300e-003	12.3506
Total	**0.5788**	**0.5217**	**0.8259**	**1.3200e-003**	**0.0000**	**0.0560**	**0.0560**	**0.0000**	**0.0560**	**0.0560**	**7.4648**	**159.8778**	**167.3426**	**0.4002**	**3.7900e-003**	**176.9232**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**17.83**	**94.76**	**58.13**	**65.15**	**0.00**	**53.92**	**53.92**	**0.00**	**53.92**	**53.92**	**0.00**	**53.34**	**51.25**	**1.47**	**5.72**	**48.87**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 36,248; Residential Outdoor: 12,083; Non-Residential Indoor: 73,370; Non-Residential Outdoor: 24,457 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Other General Industrial Equipment	1	8.00	167	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	180.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	350.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0195**	**0.0213**	**0.0407**	**2.9500e-003**	**0.0198**	**0.0228**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9800e-003	0.0223	0.0213	7.0000e-005	1.5100e-003	3.2000e-004	1.8300e-003	4.2000e-004	3.0000e-004	7.1000e-004	0.0000	6.0495	6.0495	4.0000e-005	0.0000	6.0504
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	8.0000e-004	7.9700e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5321	1.5321	7.0000e-005	0.0000	1.5336
Total	**2.4700e-003**	**0.0231**	**0.0292**	**9.0000e-005**	**3.3400e-003**	**3.3000e-004**	**3.6700e-003**	**9.1000e-004**	**3.1000e-004**	**1.2100e-003**	**0.0000**	**7.5817**	**7.5817**	**1.1000e-004**	**0.0000**	**7.5840**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0195**	**0.0213**	**0.0407**	**2.9500e-003**	**0.0198**	**0.0228**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9800e-003	0.0223	0.0213	7.0000e-005	1.5100e-003	3.2000e-004	1.8300e-003	4.2000e-004	3.0000e-004	7.1000e-004	0.0000	6.0495	6.0495	4.0000e-005	0.0000	6.0504
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	8.0000e-004	7.9700e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5321	1.5321	7.0000e-005	0.0000	1.5336
Total	**2.4700e-003**	**0.0231**	**0.0292**	**9.0000e-005**	**3.3400e-003**	**3.3000e-004**	**3.6700e-003**	**9.1000e-004**	**3.1000e-004**	**1.2100e-003**	**0.0000**	**7.5817**	**7.5817**	**1.1000e-004**	**0.0000**	**7.5840**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0453	0.0000	0.0453	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0453**	**6.8900e-003**	**0.0522**	**0.0249**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0433	0.0414	1.3000e-004	2.9300e-003	6.3000e-004	3.5700e-003	8.1000e-004	5.8000e-004	1.3900e-003	0.0000	11.7630	11.7630	8.0000e-005	0.0000	11.7647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.4000e-004	2.3900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4596	0.4596	2.0000e-005	0.0000	0.4601
Total	**3.9900e-003**	**0.0435**	**0.0438**	**1.4000e-004**	**3.4800e-003**	**6.3000e-004**	**4.1200e-003**	**9.6000e-004**	**5.8000e-004**	**1.5400e-003**	**0.0000**	**12.2226**	**12.2226**	**1.0000e-004**	**0.0000**	**12.2248**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0453	0.0000	0.0453	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0453**	**6.8900e-003**	**0.0522**	**0.0249**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0433	0.0414	1.3000e-004	2.9300e-003	6.3000e-004	3.5700e-003	8.1000e-004	5.8000e-004	1.3900e-003	0.0000	11.7630	11.7630	8.0000e-005	0.0000	11.7647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.4000e-004	2.3900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4596	0.4596	2.0000e-005	0.0000	0.4601
Total	**3.9900e-003**	**0.0435**	**0.0438**	**1.4000e-004**	**3.4800e-003**	**6.3000e-004**	**4.1200e-003**	**9.6000e-004**	**5.8000e-004**	**1.5400e-003**	**0.0000**	**12.2226**	**12.2226**	**1.0000e-004**	**0.0000**	**12.2248**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1653	0.1175	1.4000e-004		9.3300e-003	9.3300e-003		8.5800e-003	8.5800e-003	0.0000	13.1740	13.1740	4.0400e-003	0.0000	13.2588
Total	**0.0159**	**0.1653**	**0.1175**	**1.4000e-004**	**0.0262**	**9.3300e-003**	**0.0355**	**0.0135**	**8.5800e-003**	**0.0221**	**0.0000**	**13.1740**	**13.1740**	**4.0400e-003**	**0.0000**	**13.2588**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.8000e-004	3.8200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7354	0.7354	3.0000e-005	0.0000	0.7361
Total	**2.3000e-004**	**3.8000e-004**	**3.8200e-003**	**1.0000e-005**	**8.8000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7354**	**0.7354**	**3.0000e-005**	**0.0000**	**0.7361**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1653	0.1175	1.4000e-004		9.3300e-003	9.3300e-003		8.5800e-003	8.5800e-003	0.0000	13.1740	13.1740	4.0400e-003	0.0000	13.2588
Total	**0.0159**	**0.1653**	**0.1175**	**1.4000e-004**	**0.0262**	**9.3300e-003**	**0.0355**	**0.0135**	**8.5800e-003**	**0.0221**	**0.0000**	**13.1740**	**13.1740**	**4.0400e-003**	**0.0000**	**13.2588**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.8000e-004	3.8200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7354	0.7354	3.0000e-005	0.0000	0.7361
Total	**2.3000e-004**	**3.8000e-004**	**3.8200e-003**	**1.0000e-005**	**8.8000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7354**	**0.7354**	**3.0000e-005**	**0.0000**	**0.7361**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8088	271.8088	0.0669	0.0000	273.2136
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8088**	**271.8088**	**0.0669**	**0.0000**	**273.2136**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0221	0.1572	0.2576	4.2000e-004	0.0112	2.3600e-003	0.0136	3.2100e-003	2.1700e-003	5.3900e-003	0.0000	37.4383	37.4383	2.9000e-004	0.0000	37.4445
Worker	0.0196	0.0321	0.3195	8.6000e-004	0.0735	4.7000e-004	0.0739	0.0196	4.3000e-004	0.0200	0.0000	61.4433	61.4433	2.7100e-003	0.0000	61.5003
Total	**0.0416**	**0.1893**	**0.5770**	**1.2800e-003**	**0.0846**	**2.8300e-003**	**0.0875**	**0.0228**	**2.6000e-003**	**0.0254**	**0.0000**	**98.8817**	**98.8817**	**3.0000e-003**	**0.0000**	**98.9447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8085	271.8085	0.0669	0.0000	273.2133
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8085**	**271.8085**	**0.0669**	**0.0000**	**273.2133**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0221	0.1572	0.2576	4.2000e-004	0.0112	2.3600e-003	0.0136	3.2100e-003	2.1700e-003	5.3900e-003	0.0000	37.4383	37.4383	2.9000e-004	0.0000	37.4445
Worker	0.0196	0.0321	0.3195	8.6000e-004	0.0735	4.7000e-004	0.0739	0.0196	4.3000e-004	0.0200	0.0000	61.4433	61.4433	2.7100e-003	0.0000	61.5003
Total	**0.0416**	**0.1893**	**0.5770**	**1.2800e-003**	**0.0846**	**2.8300e-003**	**0.0875**	**0.0228**	**2.6000e-003**	**0.0254**	**0.0000**	**98.8817**	**98.8817**	**3.0000e-003**	**0.0000**	**98.9447**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5516	3.5516	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5516**	**3.5516**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	1.8900e-003	3.1700e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.8000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4862	0.4862	0.0000	0.0000	0.4862
Worker	2.2000e-004	3.8000e-004	3.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7812	0.7812	3.0000e-005	0.0000	0.7819
Total	**4.8000e-004**	**2.2700e-003**	**6.9100e-003**	**2.0000e-005**	**1.1200e-003**	**4.0000e-005**	**1.1600e-003**	**3.0000e-004**	**4.0000e-005**	**3.3000e-004**	**0.0000**	**1.2674**	**1.2674**	**3.0000e-005**	**0.0000**	**1.2682**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5515	3.5515	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5515**	**3.5515**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	1.8900e-003	3.1700e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.8000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4862	0.4862	0.0000	0.0000	0.4862
Worker	2.2000e-004	3.8000e-004	3.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7812	0.7812	3.0000e-005	0.0000	0.7819
Total	**4.8000e-004**	**2.2700e-003**	**6.9100e-003**	**2.0000e-005**	**1.1200e-003**	**4.0000e-005**	**1.1600e-003**	**3.0000e-004**	**4.0000e-005**	**3.3000e-004**	**0.0000**	**1.2674**	**1.2674**	**3.0000e-005**	**0.0000**	**1.2682**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	8.6000e-004	8.4600e-003	3.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7688	1.7688	7.0000e-005	0.0000	1.7704
Total	**5.1000e-004**	**8.6000e-004**	**8.4600e-003**	**3.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7688**	**1.7688**	**7.0000e-005**	**0.0000**	**1.7704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	8.6000e-004	8.4600e-003	3.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	6.0000e-004	0.0000	1.7688	1.7688	7.0000e-005	0.0000	1.7704
Total	**5.1000e-004**	**8.6000e-004**	**8.4600e-003**	**3.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7688**	**1.7688**	**7.0000e-005**	**0.0000**	**1.7704**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**0.3414**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.7000e-004	4.6500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9729	0.9729	4.0000e-005	0.0000	0.9737
Total	**2.8000e-004**	**4.7000e-004**	**4.6500e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9729**	**0.9729**	**4.0000e-005**	**0.0000**	**0.9737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**0.3414**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.7000e-004	4.6500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9729	0.9729	4.0000e-005	0.0000	0.9737
Total	**2.8000e-004**	**4.7000e-004**	**4.6500e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9729**	**0.9729**	**4.0000e-005**	**0.0000**	**0.9737**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	42.60	21.00	36.40	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.436123	0.064009	0.189752	0.169683	0.063959	0.008608	0.013150	0.039191	0.001722	0.001069	0.008434	0.000534	0.003765

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4183	26.4183	5.1000e-004	4.8000e-004	26.5790
NaturalGas Unmitigated	2.6700e-003	0.0234	0.0142	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.4183	26.4183	5.1000e-004	4.8000e-004	26.5790
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	50.9019	50.9019	2.3000e-003	4.8000e-004	51.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	74.1324	74.1324	3.3500e-003	6.9000e-004	74.4177

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	284887	1.5400e-003	0.0131	5.5900e-003	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	15.2027	15.2027	2.9000e-004	2.8000e-004	15.2952
General Office Building	207600	1.1200e-003	0.0102	8.5500e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	11.0783	11.0783	2.1000e-004	2.0000e-004	11.1458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2572	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1373	0.1373	0.0000	0.0000	0.1381
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0234**	**0.0143**	**1.4000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4183**	**26.4183**	**5.0000e-004**	**4.8000e-004**	**26.5790**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	284887	1.5400e-003	0.0131	5.5900e-003	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	15.2027	15.2027	2.9000e-004	2.8000e-004	15.2952
General Office Building	207600	1.1200e-003	0.0102	8.5500e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	11.0783	11.0783	2.1000e-004	2.0000e-004	11.1458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2572	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1373	0.1373	0.0000	0.0000	0.1381
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.6700e-003**	**0.0234**	**0.0143**	**1.4000e-004**		**1.8400e-003**	**1.8400e-003**		**1.8400e-003**	**1.8400e-003**	**0.0000**	**26.4183**	**26.4183**	**5.0000e-004**	**4.8000e-004**	**26.5790**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	79595.9	23.1554	1.0500e-003	2.2000e-004	23.2445
General Office Building	134040	38.9938	1.7600e-003	3.6000e-004	39.1439
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	39160	11.3921	5.2000e-004	1.1000e-004	11.4360
Unrefrigerated Warehouse-No Rail	2032	0.5911	3.0000e-005	1.0000e-005	0.5934
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**74.1323**	**3.3600e-003**	**7.0000e-004**	**74.4178**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	69614.1	20.2516	9.2000e-004	1.9000e-004	20.3295
General Office Building	124058	36.0900	1.6300e-003	3.4000e-004	36.2289
Other Asphalt Surfaces	-9981.75	-2.9038	-0.0001	0.0000	-2.9150
Other Non-Asphalt Surfaces	-9981.75	-5.8076	-0.0003	-0.0001	-5.8300
Parking Lot	29178.3	8.4883	3.8000e-004	8.0000e-005	8.5210
Unrefrigerated Warehouse-No Rail	-7949.75	-2.3127	-0.0001	0.0000	-2.3216
User Defined Industrial	-9981.75	-2.9038	-0.0001	0.0000	-2.9150
Total		**50.9019**	**2.3100e-003**	**4.8000e-004**	**51.0979**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5159	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140
Unmitigated	0.5681	3.9300e-003	0.3315	3.1000e-004		0.0240	0.0240		0.0240	0.0240	2.0214	0.2559	2.2773	0.0208	0.0000	2.7140

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0871					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0400	2.1100e-003	0.1742	3.0000e-004		0.0231	0.0231		0.0231	0.0231	2.0214	0.0000	2.0214	0.0205	0.0000	2.4528
Landscaping	4.8600e-003	1.8200e-003	0.1573	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2559	0.2559	2.5000e-004	0.0000	0.2612
Total	**0.5681**	**3.9300e-003**	**0.3315**	**3.1000e-004**		**0.0240**	**0.0240**		**0.0240**	**0.0240**	**2.0214**	**0.2559**	**2.2773**	**0.0208**	**0.0000**	**2.7140**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0400	2.1100e-003	0.1742	3.0000e-004		0.0231	0.0231		0.0231	0.0231	2.0214	0.0000	2.0214	0.0205	0.0000	2.4528
Landscaping	4.8600e-003	1.8200e-003	0.1573	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2559	0.2559	2.5000e-004	0.0000	0.2612
Total	**0.5159**	**3.9300e-003**	**0.3315**	**3.1000e-004**		**0.0240**	**0.0240**		**0.0240**	**0.0240**	**2.0214**	**0.2559**	**2.2773**	**0.0208**	**0.0000**	**2.7140**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	9.0060	0.1175	2.8400e-003	12.3524
Mitigated	9.0060	0.1174	2.8300e-003	12.3506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36823 / 0.862583	3.4661	0.0447	1.0800e-003	4.7404
General Office Building	2.1328 / 1.3072	5.3649	0.0697	1.6800e-003	7.3511
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0925 / 0	0.1750	3.0200e-003	7.0000e-005	0.2609
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0060**	**0.1175**	**2.8300e-003**	**12.3524**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36823 / 0.862583	3.4661	0.0447	1.0800e-003	4.7397
General Office Building	2.1328 / 1.3072	5.3649	0.0697	1.6800e-003	7.3500
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0925 / 0	0.1750	3.0200e-003	7.0000e-005	0.2608
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0060**	**0.1174**	**2.8300e-003**	**12.3506**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3034	0.2543	0.0000	9.6442
Unmitigated	4.3034	0.2543	0.0000	9.6442

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	9.66	1.9609	0.1159	0.0000	4.3945
General Office Building	11.16	2.2654	0.1339	0.0000	5.0769
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.38	0.0771	4.5600e-003	0.0000	0.1729
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4.3034**	**0.2543**	**0.0000**	**9.6442**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	9.66	1.9609	0.1159	0.0000	4.3945
General Office Building	11.16	2.2654	0.1339	0.0000	5.0769
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.38	0.0771	4.5600e-003	0.0000	0.1729
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4.3034**	**0.2543**	**0.0000**	**9.6442**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	20	450	0.74	Diesel
Pumps	1	8.00	250	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Generator Sets	1.4600e-003	0.0151	7.4500e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	3.7849	3.7849	1.2000e-004	0.0000	3.7874
Pumps	0.0588	0.4792	0.4727	8.2000e-004		0.0297	0.0297		0.0297	0.0297	0.0000	70.6509	70.6509	4.7200e-003	0.0000	70.7501
Total	**0.0603**	**0.4943**	**0.4801**	**8.6000e-004**		**0.0302**	**0.0302**		**0.0302**	**0.0302**	**0.0000**	**74.4358**	**74.4358**	**4.8400e-003**	**0.0000**	**74.5375**

10.0 Vegetation

CCC Placer Center Kitchen/Dorm Replacement Project

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.00	1000sqft	0.26	12,000.00	0
Unrefrigerated Warehouse-No Rail	0.40	1000sqft	0.01	400.00	0
User Defined Industrial	1.00	User Defined Unit	0.08	0.00	0
Other Asphalt Surfaces	6.30	1000sqft	0.14	6,300.00	0
Other Non-Asphalt Surfaces	1.60	1000sqft	0.04	1,600.00	0
Other Non-Asphalt Surfaces	0.64	Acre	0.64	27,878.40	0
Parking Lot	44.50	1000sqft	1.02	44,500.00	0
Apartments Low Rise	21.00	Dwelling Unit	1.31	19,000.00	60

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Residential 19,000 sqft from P.D, dwelling unit is approx. UnRef. warehouse is water tank bldg. Other non-asphalt surfaces (0.64 acres) is approx. includes concrete walkways and gravel path, based on total of 3.5 acres. User industrial is solar panels.

Construction Phase -

Off-road Equipment - Other general industrial equipment represents potential impact hammer on a backhoe.

Trips and VMT -

Demolition - Demolition area includes removal of existing paving and structures (38,500 sq ft) plus an approximate area of 1075 sqft for the existing water tank.

Grading -

Architectural Coating - Assume low VOC paint (100 g/L)

Vehicle Trips - Assume no trips associated with the operation of the project because it is replacing existing uses, and no change in occupancy.

Woodstoves - no hearths/fireplaces at site but 1 wood pizza oven

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation - changed VOC paint to 100 g/L

Energy Mitigation - Onsite solar panels will generate 50 kW of renewable energy.

Operational Off-Road Equipment - Assumed default for diesel water tank pump. Assumed 450 hp emergency generator

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	24,757.00	24,457.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	74,270.00	73,370.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	12,825.00	12,083.00
tblArchitecturalCoating	ConstArea_Residential_Interior	38,475.00	36,248.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	11.55	0.00
tblFireplaces	NumberNoFireplace	2.10	0.00
tblFireplaces	NumberWood	7.35	0.00
tblGrading	MaterialImported	0.00	2,800.00
tblLandUse	LandUseSquareFeet	21,000.00	19,000.00
tblLandUse	LotAcreage	0.28	0.26
tblLandUse	LotAcreage	0.00	0.08
tblOffRoadEquipment	HorsePower	87.00	167.00
tblOffRoadEquipment	LoadFactor	0.34	0.40
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	20.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	450.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	2.59	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	0.98	0.00

tblVehicleTrips	SU_TR	2.59	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	2.59	0.00
tblWoodstoves	NumberCatalytic	1.05	0.00
tblWoodstoves	NumberConventional	0.00	1.00
tblWoodstoves	NumberNoncatalytic	1.05	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.3158	68.2999	53.6436	0.0943	19.5804	3.0077	22.5881	10.3356	2.7671	13.1027	0.0000	9,418.5492	9,418.5492	1.2711	0.0000	9,445.2422
2018	37.9712	24.6885	21.9861	0.0388	0.7793	1.5169	2.2962	0.2088	1.4256	1.6343	0.0000	3,602.4354	3,602.4354	0.6656	0.0000	3,616.4125
Total	**44.2869**	**92.9884**	**75.6297**	**0.1331**	**20.3597**	**4.5246**	**24.8843**	**10.5444**	**4.1926**	**14.7370**	**0.0000**	**13,020.9846**	**13,020.9846**	**1.9367**	**0.0000**	**13,061.6546**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.3158	68.2999	53.6436	0.0943	19.5804	3.0077	22.5881	10.3356	2.7671	13.1027	0.0000	9,418.5492	9,418.5492	1.2711	0.0000	9,445.2422
2018	37.9712	24.6885	21.9861	0.0388	0.7793	1.5169	2.2962	0.2088	1.4256	1.6343	0.0000	3,602.4354	3,602.4354	0.6656	0.0000	3,616.4125
Total	**44.2869**	**92.9884**	**75.6297**	**0.1331**	**20.3597**	**4.5246**	**24.8843**	**10.5444**	**4.1926**	**14.7370**	**0.0000**	**13,020.9846**	**13,020.9846**	**1.9367**	**0.0000**	**13,061.6546**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Energy	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.6164	5.3432	4.5263	0.0103		0.2834	0.2834		0.2834	0.2834		1,040.2452	1,040.2452	0.0549		1,041.3976
Total	**4.5279**	**5.5434**	**10.6013**	**0.0185**	**0.0000**	**0.8664**	**0.8664**	**0.0000**	**0.8664**	**0.8664**	**54.3456**	**1,202.9472**	**1,257.2928**	**0.6133**	**2.9300e-003**	**1,271.0796**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6105	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Energy	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.6164	5.3432	4.5263	0.0103		0.2834	0.2834		0.2834	0.2834		1,040.2452	1,040.2452	0.0549		1,041.3976
Total	**4.2415**	**5.5434**	**10.6013**	**0.0185**	**0.0000**	**0.8664**	**0.8664**	**0.0000**	**0.8664**	**0.8664**	**54.3456**	**1,202.9472**	**1,257.2928**	**0.6133**	**2.9300e-003**	**1,271.0796**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**19.94**	**96.39**	**42.70**	**55.38**	**0.00**	**32.71**	**32.71**	**0.00**	**32.71**	**32.71**	**0.00**	**86.47**	**82.74**	**8.95**	**0.00**	**81.93**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 36,248; Residential Outdoor: 12,083; Non-Residential Indoor: 73,370; Non-Residential Outdoor: 24,457 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Other General Industrial Equipment	1	8.00	167	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	180.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	350.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9478	0.0000	1.9478	0.2949	0.0000	0.2949			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.9478**	**2.1252**	**4.0730**	**0.2949**	**1.9797**	**2.2746**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1812	2.1165	1.6900	6.7300e-003	0.1570	0.0324	0.1894	0.0430	0.0298	0.0728		667.5045	667.5045	4.5800e-003		667.6006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0571	0.0708	0.9187	2.3600e-003	0.1916	1.1600e-003	0.1928	0.0508	1.0700e-003	0.0519		186.4681	186.4681	7.4600e-003		186.6247
Total	**0.2383**	**2.1873**	**2.6087**	**9.0900e-003**	**0.3486**	**0.0336**	**0.3821**	**0.0938**	**0.0309**	**0.1247**		**853.9726**	**853.9726**	**0.0120**		**854.2253**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9478	0.0000	1.9478	0.2949	0.0000	0.2949			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.9478**	**2.1252**	**4.0730**	**0.2949**	**1.9797**	**2.2746**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1812	2.1165	1.6900	6.7300e-003	0.1570	0.0324	0.1894	0.0430	0.0298	0.0728		667.5045	667.5045	4.5800e-003		667.6006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0571	0.0708	0.9187	2.3600e-003	0.1916	1.1600e-003	0.1928	0.0508	1.0700e-003	0.0519		186.4681	186.4681	7.4600e-003		186.6247
Total	**0.2383**	**2.1873**	**2.6087**	**9.0900e-003**	**0.3486**	**0.0336**	**0.3821**	**0.0938**	**0.0309**	**0.1247**		**853.9726**	**853.9726**	**0.0120**		**854.2253**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1296	0.0000	18.1296	9.9403	0.0000	9.9403			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.1296**	**2.7542**	**20.8838**	**9.9403**	**2.5339**	**12.4742**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4091	16.4615	13.1441	0.0523	1.2209	0.2521	1.4730	0.3344	0.2319	0.5663		5,191.7016	5,191.7016	0.0356		5,192.4494
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**1.4776**	**16.5465**	**14.2466**	**0.0552**	**1.4508**	**0.2535**	**1.7043**	**0.3953**	**0.2332**	**0.6285**		**5,415.4633**	**5,415.4633**	**0.0446**		**5,416.3990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1296	0.0000	18.1296	9.9403	0.0000	9.9403			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.1296**	**2.7542**	**20.8838**	**9.9403**	**2.5339**	**12.4742**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4091	16.4615	13.1441	0.0523	1.2209	0.2521	1.4730	0.3344	0.2319	0.5663		5,191.7016	5,191.7016	0.0356		5,192.4494
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**1.4776**	**16.5465**	**14.2466**	**0.0552**	**1.4508**	**0.2535**	**1.7043**	**0.3953**	**0.2332**	**0.6285**		**5,415.4633**	**5,415.4633**	**0.0446**		**5,416.3990**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9705	41.3237	29.3861	0.0355		2.3328	2.3328		2.1462	2.1462		3,630.4610	3,630.4610	1.1124		3,653.8207
Total	**3.9705**	**41.3237**	**29.3861**	**0.0355**	**6.5523**	**2.3328**	**8.8851**	**3.3675**	**2.1462**	**5.5137**		**3,630.4610**	**3,630.4610**	**1.1124**		**3,653.8207**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**0.0685**	**0.0850**	**1.1025**	**2.8300e-003**	**0.2299**	**1.4000e-003**	**0.2313**	**0.0610**	**1.2900e-003**	**0.0623**		**223.7617**	**223.7617**	**8.9500e-003**		**223.9496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9705	41.3237	29.3861	0.0355		2.3328	2.3328		2.1462	2.1462	0.0000	3,630.4610	3,630.4610	1.1124		3,653.8207
Total	**3.9705**	**41.3237**	**29.3861**	**0.0355**	**6.5523**	**2.3328**	**8.8851**	**3.3675**	**2.1462**	**5.5137**	**0.0000**	**3,630.4610**	**3,630.4610**	**1.1124**		**3,653.8207**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0850	1.1025	2.8300e-003	0.2299	1.4000e-003	0.2313	0.0610	1.2900e-003	0.0623		223.7617	223.7617	8.9500e-003		223.9496
Total	**0.0685**	**0.0850**	**1.1025**	**2.8300e-003**	**0.2299**	**1.4000e-003**	**0.2313**	**0.0610**	**1.2900e-003**	**0.0623**		**223.7617**	**223.7617**	**8.9500e-003**		**223.9496**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1737	1.3222	1.7110	3.7000e-003	0.1023	0.0207	0.1230	0.0292	0.0190	0.0483		364.8824	364.8824	2.7900e-003		364.9410
Worker	0.2017	0.2502	3.2462	8.3400e-003	0.6770	4.1100e-003	0.6811	0.1795	3.7900e-003	0.1833		658.8540	658.8540	0.0263		659.4072
Total	**0.3754**	**1.5723**	**4.9572**	**0.0120**	**0.7793**	**0.0248**	**0.8041**	**0.2088**	**0.0228**	**0.2316**		**1,023.7364**	**1,023.7364**	**0.0291**		**1,024.3483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1737	1.3222	1.7110	3.7000e-003	0.1023	0.0207	0.1230	0.0292	0.0190	0.0483		364.8824	364.8824	2.7900e-003		364.9410
Worker	0.2017	0.2502	3.2462	8.3400e-003	0.6770	4.1100e-003	0.6811	0.1795	3.7900e-003	0.1833		658.8540	658.8540	0.0263		659.4072
Total	**0.3754**	**1.5723**	**4.9572**	**0.0120**	**0.7793**	**0.0248**	**0.8041**	**0.2088**	**0.0228**	**0.2316**		**1,023.7364**	**1,023.7364**	**0.0291**		**1,024.3483**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1564	1.2034	1.5550	3.6900e-003	0.1023	0.0186	0.1209	0.0292	0.0171	0.0463		358.5243	358.5243	2.6800e-003		358.5806
Worker	0.1775	0.2243	2.8984	8.3400e-003	0.6770	4.0300e-003	0.6810	0.1795	3.7300e-003	0.1833		633.9721	633.9721	0.0242		634.4801
Total	**0.3339**	**1.4276**	**4.4534**	**0.0120**	**0.7793**	**0.0226**	**0.8019**	**0.2088**	**0.0208**	**0.2296**		**992.4964**	**992.4964**	**0.0269**		**993.0608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1564	1.2034	1.5550	3.6900e-003	0.1023	0.0186	0.1209	0.0292	0.0171	0.0463		358.5243	358.5243	2.6800e-003		358.5806
Worker	0.1775	0.2243	2.8984	8.3400e-003	0.6770	4.0300e-003	0.6810	0.1795	3.7300e-003	0.1833		633.9721	633.9721	0.0242		634.4801
Total	**0.3339**	**1.4276**	**4.4534**	**0.0120**	**0.7793**	**0.0226**	**0.8019**	**0.2088**	**0.0208**	**0.2296**		**992.4964**	**992.4964**	**0.0269**		**993.0608**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.1688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5748**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0670	0.0846	1.0937	3.1500e-003	0.2555	1.5200e-003	0.2570	0.0678	1.4100e-003	0.0692		239.2348	239.2348	9.1300e-003		239.4265
Total	**0.0670**	**0.0846**	**1.0937**	**3.1500e-003**	**0.2555**	**1.5200e-003**	**0.2570**	**0.0678**	**1.4100e-003**	**0.0692**		**239.2348**	**239.2348**	**9.1300e-003**		**239.4265**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.1688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5748**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0670	0.0846	1.0937	3.1500e-003	0.2555	1.5200e-003	0.2570	0.0678	1.4100e-003	0.0692		239.2348	239.2348	9.1300e-003		239.4265
Total	**0.0670**	**0.0846**	**1.0937**	**3.1500e-003**	**0.2555**	**1.5200e-003**	**0.2570**	**0.0678**	**1.4100e-003**	**0.0692**		**239.2348**	**239.2348**	**9.1300e-003**		**239.4265**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6357					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**37.9343**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0465	0.6016	1.7300e-003	0.1405	8.4000e-004	0.1413	0.0373	7.7000e-004	0.0380		131.5791	131.5791	5.0200e-003		131.6846
Total	**0.0368**	**0.0465**	**0.6016**	**1.7300e-003**	**0.1405**	**8.4000e-004**	**0.1413**	**0.0373**	**7.7000e-004**	**0.0380**		**131.5791**	**131.5791**	**5.0200e-003**		**131.6846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6357					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**37.9343**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0465	0.6016	1.7300e-003	0.1405	8.4000e-004	0.1413	0.0373	7.7000e-004	0.0380		131.5791	131.5791	5.0200e-003		131.6846
Total	**0.0368**	**0.0465**	**0.6016**	**1.7300e-003**	**0.1405**	**8.4000e-004**	**0.1413**	**0.0373**	**7.7000e-004**	**0.0380**		**131.5791**	**131.5791**	**5.0200e-003**		**131.6846**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	42.60	21.00	36.40	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.436123	0.064009	0.189752	0.169683	0.063959	0.008608	0.013150	0.039191	0.001722	0.001069	0.008434	0.000534	0.003765

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390
NaturalGas Unmitigated	0.0146	0.1284	0.0780	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.5679	159.5679	3.0600e-003	2.9300e-003	160.5390

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	780.513	8.4200e-003	0.0719	0.0306	4.6000e-004		5.8200e-003	5.8200e-003		5.8200e-003	5.8200e-003		91.8251	91.8251	1.7600e-003	1.6800e-003	92.3839
General Office Building	568.767	6.1300e-003	0.0558	0.0468	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003		66.9138	66.9138	1.2800e-003	1.2300e-003	67.3210
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	7.04658	8.0000e-005	6.9000e-004	5.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.8290	0.8290	2.0000e-005	2.0000e-005	0.8341
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0146**	**0.1284**	**0.0780**	**7.9000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5679**	**159.5679**	**3.0600e-003**	**2.9300e-003**	**160.5390**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.568767	6.1300e-003	0.0558	0.0468	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003		66.9138	66.9138	1.2800e-003	1.2300e-003	67.3210
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.00704658	8.0000e-005	6.9000e-004	5.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.8290	0.8290	2.0000e-005	2.0000e-005	0.8341
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Low Rise	0.780513	8.4200e-003	0.0719	0.0306	4.6000e-004		5.8200e-003	5.8200e-003		5.8200e-003	5.8200e-003		91.8251	91.8251	1.7600e-003	1.6800e-003	92.3839
Total		**0.0146**	**0.1284**	**0.0780**	**7.9000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**159.5679**	**159.5679**	**3.0600e-003**	**2.9300e-003**	**160.5390**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6105	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430
Unmitigated	3.8968	0.0718	5.9969	7.4600e-003		0.5729	0.5729		0.5729	0.5729	54.3456	3.1341	57.4797	0.5554	0.0000	69.1430

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.9757	0.0516	4.2490	7.3600e-003		0.5633	0.5633		0.5633	0.5633	54.3456	0.0000	54.3456	0.5523	0.0000	65.9438
Landscaping	0.0540	0.0202	1.7480	9.0000e-005		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		3.1341	3.1341	3.1000e-003		3.1993
Total	**3.8968**	**0.0718**	**5.9969**	**7.4500e-003**		**0.5729**	**0.5729**		**0.5729**	**0.5729**	**54.3456**	**3.1341**	**57.4797**	**0.5554**	**0.0000**	**69.1430**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1909					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.9757	0.0516	4.2490	7.3600e-003		0.5633	0.5633		0.5633	0.5633	54.3456	0.0000	54.3456	0.5523	0.0000	65.9438
Landscaping	0.0540	0.0202	1.7480	9.0000e-005		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		3.1341	3.1341	3.1000e-003		3.1993
Total	**3.6105**	**0.0718**	**5.9969**	**7.4500e-003**		**0.5729**	**0.5729**		**0.5729**	**0.5729**	**54.3456**	**3.1341**	**57.4797**	**0.5554**	**0.0000**	**69.1430**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	20	450	0.74	Diesel
Pumps	1	8.00	250	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Generator Sets	0.1461	1.5094	0.7452	3.6700e-003		0.0455	0.0455		0.0455	0.0455		417.2107	417.2107	0.0132		417.4882
Pumps	0.4703	3.8338	3.7812	6.5800e-003		0.2379	0.2379		0.2379	0.2379		623.0346	623.0346	0.0417		623.9094
Total	**0.6164**	**5.3432**	**4.5263**	**0.0103**		**0.2834**	**0.2834**		**0.2834**	**0.2834**		**1,040.2452**	**1,040.2452**	**0.0549**		**1,041.3976**

10.0 Vegetation

Appendix B
Special-Status Species List

Table 1. Special-Status Plant Species, CNDDB Query (2015)

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Name
Vascular	Allium jepsonii	Jepson's onion	None	None	-	1B.2	Auburn
Vascular	Balsamorhiza macrolepis	big-scale balsamroot	None	None	-	1B.2	Pilot Hill
Vascular	Calystegia stebbinsii	Stebbins' morning-glory	Endangered	Endangered	-	1B.1	Coloma, Pilot Hill
Vascular	Ceanothus roderickii	Pine Hill ceanothus	Endangered	Rare	-	1B.2	Pilot Hill
Vascular	Chlorogalum grandiflorum	Red Hills soaproot	None	None	-	1B.2	Colfax, Coloma, Greenwood, Pilot Hill
Vascular	Galium californicum ssp. sierrae	El Dorado bedstraw	Endangered	Rare	-	1B.2	Pilot Hill
Vascular	Gratiola heterosepala	Boggs Lake hedge-hyssop	None	Endangered	-	1B.2	Rocklin
Vascular	Packera layneae	Layne's ragwort	Threatened	Rare	-	1B.2	Coloma, Pilot Hill
Vascular	Poa sierrae	Sierra blue grass	None	None	-	1B.3	Colfax
Vascular	Viburnum ellipticum	oval-leaved viburnum	None	None	-	2B.3	Auburn, Greenwood
Vascular	Wyethia reticulata	El Dorado County mule ears	None	None	-	1B.2	Coloma, Pilot Hill

Table 2. Special-Status Wildlife Species, CNDDB Query (2015)

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Quad Name
Birds	Agelaius tricolor	tricolored blackbird	None	None	SSC	Coloma, Pilot Hill
Birds	Aquila chrysaetos	golden eagle	None	None	FP ; WL	Lake Combie
Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	-	Rocklin
Mammals	Corynorhinus townsendii	Townsend's big-eared bat	None	Candidate Threatened	SSC	Auburn, Gold Hill
Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	-	Colfax, Lake Combie, Pilot Hill, Rocklin
Birds	Elanus leucurus	white-tailed kite	None	None	FP	Pilot Hill, Rocklin
Reptiles	Emys marmorata	western pond turtle	None	None	SSC	Auburn, Colfax, Coloma, Gold Hill, Greenwood, Lake Combie, Pilot Hill, Rocklin
Birds	Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	Auburn
Birds	Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	Lake Combie, Pilot Hill, Wolf
Birds	Icteria virens	yellow-breasted chat	None	None	SSC	Auburn, Greenwood, Pilot Hill
Birds	Lanius ludovicianus	loggerhead shrike	None	None	SSC	Colfax
Birds	Laterallus jamaicensis coturniculus	California black rail	None	Threatened	FP	Gold Hill, Rocklin, Wolf
Fish	Mylopharodon conocephalus	hardhead	None	None	SSC	Coloma
Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Threatened	None	-	Gold Hill, Pilot Hill, Rocklin
Birds	Pandion haliaetus	osprey	None	None	WL	Rocklin

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Quad Name
Mammals	Pekania pennanti	fisher - West Coast DPS	Proposed Threatened	Candidate Threatened	SSC	Colfax, Coloma
Reptiles	Phrynosoma blainvillii	coast horned lizard	None	None	SSC	Auburn, Colfax
Birds	Progne subis	purple martin	None	None	SSC	Rocklin
Amphibians	Rana boylii	foothill yellow-legged frog	None	None	SSC	Colfax, Coloma, Greenwood, Lake Combie
Amphibians	Rana draytonii	California red-legged frog	Threatened	None	SSC	Coloma
Birds	Riparia riparia	bank swallow	None	Threatened	-	Coloma
Birds	Setophaga petechia	yellow warbler	None	None	SSC	Auburn, Greenwood

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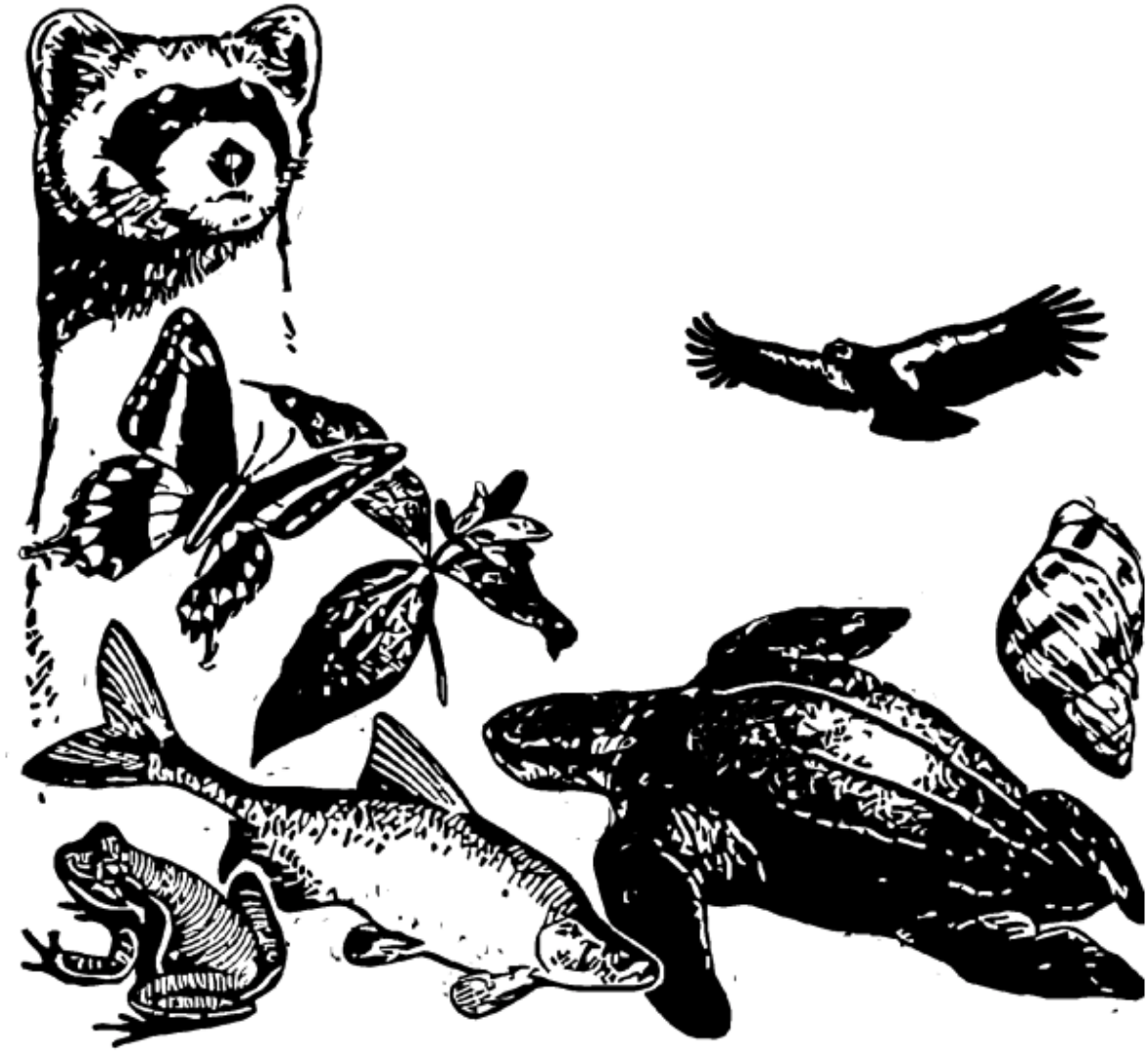
U.S. Fish & Wildlife Service

CCC Placer Center Kitchen and Dorm Replacement Project

IPaC Trust Resource Report

Generated January 15, 2016 01:02 PM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

US Fish & Wildlife Service

IPaC Trust Resource Report

NAME

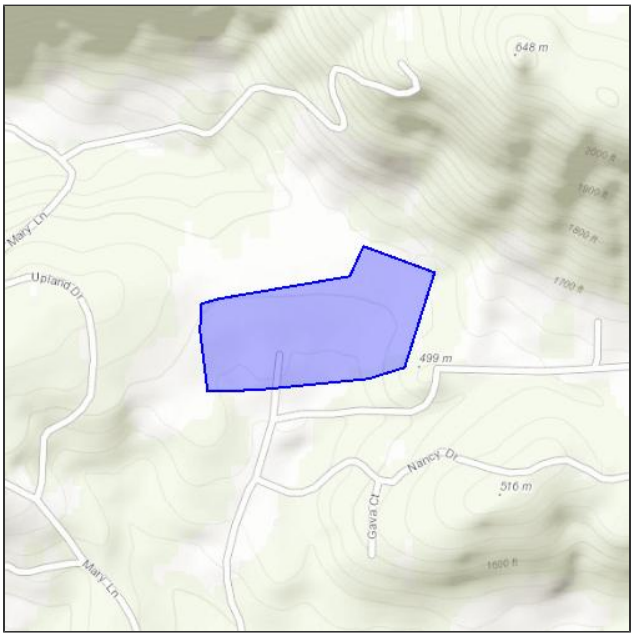
CCC Placer Center Kitchen and Dorm Replacement Project

LOCATION

Placer County, California

IPAC LINK

https://ecos.fws.gov/ipac/project/JWMZS-BS7EN-G6JDM-MUE72-KSVKD4



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

California Red-legged Frog Rana draytonii — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D02D

Fishes

Delta Smelt Hypomesus transpacificus — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070

Steelhead Oncorhynchus (=Salmo) mykiss — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E08D

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php

The following species of migratory birds could potentially be affected by activities in this location:

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Black Rail Laterallus jamaicensis — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A

California Spotted Owl Strix occidentalis occidentalis — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08L

Calliope Hummingbird Stellula calliope — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0K3

Costa's Hummingbird Calypte costae — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE

Flammulated Owl Otus flammeolus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DK

Fox Sparrow Passerella iliaca — Bird of conservation concern
Year-round

Green-tailed Towhee Pipilo chlorurus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0IO

Lewis's Woodpecker Melanerpes lewis — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ

Loggerhead Shrike Lanius ludovicianus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY

Long-billed Curlew Numenius americanus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S

Nuttall's Woodpecker Picoides nuttallii — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT

Oak Titmouse Baeolophus inornatus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ

Olive-sided Flycatcher Contopus cooperi — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Rufous-crowned Sparrow Aimophila ruficeps — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus — Bird of conservation concern
Season: Breeding

Swainson's Hawk Buteo swainsoni — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070

Western Grebe aechmophorus occidentalis — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

Williamson's Sapsucker Sphyrapicus thyroideus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FX

Yellow-billed Magpie Pica nuttalli Bird of conservation concern

Year-round

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0N8

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

Freshwater Emergent Wetland

PEMKx 0.731 acre

Freshwater Pond

PUBKx 1.28 acres

Other

PUSKx 0.314 acre

A full description for each wetland code can be found at the National Wetlands

Inventory website: http://107.20.228.18/decoders/wetlands.aspx

Appendix C

Built Resources Technical Report

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z
Other Listings _____
Review Code _____ Reviewer _____ Date _____

*Resource Name or # (Assigned by recorder) Placer Center

P1. Other Identifier: N/A

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Placer
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Auburn Date 1953 (Revised 1981) T 13N; R 8E; __ ¼ of Sec 10; _____ B.M.

c. Address 3710 Christian Valley Road City Auburn Zip 95602

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____mE/ _____mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 075-140-002-000 and 075-140-008-000

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This property contains the Placer Center facility (**Photograph 1**). Overall, the CCC property consists of63 acres in a rural setting north of Auburn. The building complex is on a 35-acre square parcel within the property. The main area of the facility consists of 15 buildings arranged in almost a rectangular configuration facing asphalt parking lots and some grass and trees. Eight of the buildings were constructed between 1948 and 1952. The remaining seven buildings were constructed between 1981 and 1993 and will not be described in detail in this inventory and evaluation because they are less than 45 years in age. The buildings upslope and north of the facility are associated with the Placer Nature Center. They were constructed in ca. 1994 and are also not part of this inventory.

The first building, Building 1, is a warehouse building that is situated in the northwest corner of the property. It is a single-story building with a rectangular plan (**Photograph 2**). It has a side gable roof clad in corrugated metal with vents at the roof's ridgeline. Beneath each gable is a square vent, one louvered and one covered with a screen. The building is sheathed in a combination of T-111 siding and corrugated metal. On the west elevation is a shed roof addition with wood posts. This elevation also features an original sliding door (**Photograph 3**). (see Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP14. Government Building

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☐ Site ☒ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1, overview of complex, camera facing east, September 22, 2015

*P6. Date Constructed/Age and Sources:
☒ Historic ☐ Prehistoric ☐ Both
ca. 1948-1952/Historic Topo Maps and Aerial Photos

*P7. Owner and Address:
California Conservation Corps

*P8. Recorded by: (Name, affiliation, address)
Patricia Ambacher, MA
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

*P9. Date Recorded:
September 22, 2015

*P10. Survey Type: (Describe)

*Attachments: NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE ☐ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

B1. Historic Name: Unknown
B2. Common Name: Placer Center
B3. Original Use: CAL FIRE Center B4. Present Use: California Conservation Corps Center
***B5. Architectural Style:** No Discernable Style
***B6. Construction History:** (Construction date, alteration, and date of alterations) ca. 1948 – constructed; 1978 – remodeling of barracks; 1990s – additions to buildings
***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** _____ **Original Location:** _____
***B8. Related Features:** None
B9. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme** Conservation **Area** Placer County
Period of Significance 1948 **Property Type** Complex **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property does not appear to meet the criteria for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or the California State Landmarks (Landmarks) program.

Placer County

Placer County is one of the earliest established counties in California and was formed in 1851 from parts of Sutter and Yuba Counties. Auburn, originally known as Wood Dry Diggings, was one of the earliest mining camps in California. It was settled in 1848, and became the county seat in 1851 (Hoover 1990:257). Because of its central location in gold country, Auburn became a major shipping and supply center for gold camps in the area. The city incorporated in 1860, and by 1865, the Central Pacific Railroad had established a depot there. For many years, Auburn was the center of the railroad's staging and freight operations. Gold mining remained a major industry in Auburn into the 1880s, but by the turn of the 20th century, agriculture and timber had replaced it as the main enterprises in the region. During this period, Auburn grew to more than 2,000 inhabitants. The city and surrounding area enjoyed moderate growth throughout the 20th century. Currently, 11,400 residents live within the Auburn city limits (Hoover 1990:260–261).

See Sketch Map Sheet

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** See Continuation Sheet

B13. Remarks:

***B14. Evaluator:** Patricia Ambacher

***Date of Evaluation:** October 2015

(This space reserved for official comments.)

Description (cont)

In addition to the entrance on the west elevation, entrances are set with a replacement single-entry paneled door, steel rollup doors, a steel single-entry door, and a set of steel double-doors. Fenestration is a mixture of fixed ribbon windows with wood frames and 6/3 steel frame awning windows.

Building 2, the Warehouse, is situated directly east of Building 1. It is also a single-story building with a rectangular plan, side-gable roof, and corrugated metal cladding throughout (**Photographs 4 and 5**). Fenestration consists of 6/3 steel frame awning windows, two of which are covered by a metal awning. Entrances are located on the south and east elevations and are set with double-sliding metal doors. A double-straight concrete staircase leads to the entrance on the south elevation. It also has rounded metal rails. Stone planter boxes adorn the south elevation.

East of Building 2 is Building 3, the Kitchen/Dining Room. The building is basically rectangular in plan with an addition on the west and north elevations (**Photographs 6 and 7**). It features a side-gable roof clad in corrugated metal siding, horizontal wood siding, and T-111 siding. Windows are aluminum sliders. Entrances are set with a combination of single-entry and double-entry doors made of wood or steel depending on the entrance. Concrete stairs lead to the entrances on the east and south elevations. A concrete patio and ramp are located on the north elevation.

Building 4, the Barracks/Dorms, is situated in the northeastern portion of the complex. It is a complex plan with three gable-roof wings projecting from the north elevation (**Photographs 8-11**). The center wing is original and the other two were added in the early 1970s.The building is sheathed in various siding that includes horizontal and vertical wood and T-111. Windows are replacement aluminum sliders. Entrances are set with single entry steel doors that are accessed by concrete stairs.

Building 5, the Theater/Recreation Hall, is located south of Building 4. It is rectangular in plan with a concrete slab foundation and side-gable roof clad in corrugated metal (**Photograph 12**). The building is sheathed in horizontal wood siding and windows are replacement aluminum sliders. Entrances are set with paneled single-entry doors. An awning shelters one entrance. On the building's north elevation is a wood deck that runs almost the full length of the building. A concrete ramp is located on the west elevation that is flanked by a metal open railing.

Building 6 is the Office and Crew Leader House (**Photograph 13**). It is situated west of Building 5. The building sits on a concrete slab foundation and has an L-plan. The building is topped with a gable roof that is clad in corrugated metal. Windows are replacement aluminum sliders and the siding is horizontal wood. Gable roofs shelter some of the entrances which are set with single-entry doors that are either flush or feature glazing and some double-doors. Concrete stairs are also present at some of the entrances. On the south elevation is a full-width concrete porch. There are flagstone planters around the building.

The Administration Building is Building 7 and it sits northwest of Building 6. The building has a T-plan with a cross-gable roof that is clad in corrugated metal and features some skylights. The building is sheathed in horizontal wood siding and features aluminum sliding windows. Entrances are set with single-entry glazed doors that have shed and gable awnings above. Concrete stairs lead to the entrance on the west elevation (**Photograph 14**).

The eighth building, the Auto Shop/Welding Building (Building 8), is situated to the west of Building 6. It is topped with a gable roof that is clad in corrugated metal, as is the entire building (**Photograph 15**). Fenestration consists of 6/3 steel-frame awning windows. Entrances include glazed metal single-entry doors, sliding corrugated metal doors, and a replacement roll-up door. An awning shelters one of the entrances on the north elevation and a shed roof addition is located on the south elevation. A ramada, a second addition, was also added to the south elevation as was a single-story addition giving the building an L-plan (**Photograph 16**).

Significance (cont)

California Department of Forestry and Fire Protection

Unless otherwise noted, the following context is a summary taken from *A Survey and Historic Significance Evaluation of the CDF Building Inventory* prepared by Mark V. Thornton for the California Department of Forestry and Fire Protection.

The California Department of Forestry and Fire Protection, today known as CAL FIRE, is California's agency responsible for protecting natural resources from fire on land designated by the State Board of Forestry as State Responsibility Area (SRA). CAL FIRE also manages the State Forest system and has responsibility to enforce the forest practice regulations, which govern forestry practices on private and other non-federal lands.

Forest management grew from a desire for North America's forests are preserved from privatization and to conserve trees as lumber resources. In 1875, Congress allocated $2,000 to Department of Agriculture for the purpose of hiring a forestry agent to investigate the issue of timber management. In 1881, the Division of Forestry was created within the Department of Agriculture with Berhnard Fernow as Division of Forestry Chief. At this point all forest reserves were still under the control of the General Land Office. Fernow wanted that control transferred to the Department of Agriculture to ensure that proper timber management practices could be enforced. The Department of the Interior disagreed. In 1891, Congress passed the Forest Reserve Act giving the President the authorization to permanently withdraw from public domain forests he deemed nationally significant.

Between 1898 and 1910, Gifford Pinchot was the Chief Forester and is considered the founder of the U.S. Forest Service (USFS) and established the USFS as the country's tool for timber management planning, including the prevention, detection and suppression of forest fires. In 1914, the first comprehensive, analytical approach to the forest fire control was written by USFS California District's head, Coert DuBois. As part of his approach, DuBois provided plans and specifications for the buildings and structures needed to implement his forest fire control approach. This included fire lookouts, crew quarters, ranger's dwellings, offices, barns, and warehouses. His plan established the concept of standardized plans for the entire California District.

In California, forest management was under the direction of the State Board of Forestry, established by the Legislator in 1885. It was the board's responsibility to disseminate information about forestry. In 1887, the board members and their assistants were given the authority to act as peace officers and enforce new the few state laws enacted that covered forest and brush lands. However, little headway was made in establishing a forestry department in California until the 1900s.

In 1919, Governor Stephens signed a bill that reorganized the forestry agency and the Board of Forestry. Among other things the bill made provisions for administrative districts, rangers, equipment, and power to enter into agreements to prevent and suppress forest fires. In 1920, ten additional rangers were added to the agency and they were divided amongst the newly created districts. It was during this period that the agency grew and began constructing lookout towers. Governor Clement Calhoun Young reorganized California's state agencies in 1927 and created the Department of Natural Resources, which included the California Division of Forestry.

The Great Depression had a great impact on California's forest fire protection largely due to the creation of conservation labor camps. Labor camp workers assisted rangers with the construction of hundreds of roads, firebreaks, and the removal of roadside hazards. When President Roosevelt established the Civilian Conservation Corps in 1933, laborers in California were assigned three tasks: firebreak construction, lookout station building, and general improvements. By the time the program ended in 1942, the Civilian Conservation Corps had built more than 300 lookout towers, and numerous fire stations and administrative buildings.

Significance (cont)

California Conservation Corps

The California Conservation Corps (CCC) was created by Governor Jerry Brown in 1976. The program is modeled after the 1933 federal program created by President Franklin Roosevelt (CCC 2015a). By 1978, there were more than 1,000 corpsmembers and they lived at 15 residential centers that were spread across California. That same year the CCC had completed 304 projects throughout the state (CCC 1978:1–2).

In 1978, the Placer Center became one of eight fire centers jointly operated by the CCC and CAL FIRE. In 1984 the center became the combined Energy Center for the CCC, incorporating its E-Con, weatherization, and solar programs. In 1996, the Construction Unit was added to the center. The projects undertaken by the Placer Center are categorized as either construction or resources. Construction projects include: construction crews for office remodels, carport and steel building construction, and the building of decks and bridges. Resource-related projects include: landscaping, constructing and maintaining trails, building and rehabilitating parks, clearing streams, removing brush to reduce the risk of wild fire, and the planting of native plants and trees (CCC 2015c). As of June 1978, the Placer Center corpsmembers worked on projects sponsored by such agencies as Tahoe Resource Conservation District, California Department of Parks and Recreation, Placer County Water Agency, and CAL FIRE. The corpsmembers also completed work at the Placer Center to accommodate female corpsmembers by remodeling the dormitory (CCC 1978).

In 1982, the 26th CCC center opened with 23 of the centers operating as 24-hour residential facilities. Corpsmembers also completed 25,000 hours of historic preservation work at places that included Santa Barbara Presidio Chapel, La Purisima Mission, and Yosemite National Park (CCC 1983:2–3, 11). In 1983, under Governor Deukmejian, the CCC became a permanent state department (CCC 2015a). Corpsmembers must be between the age of 18 and 25 years old and they average approximately nine months in service. Since its inception, more than 120,000 young people have been a part of the CCC (CCC 2015b).

The Placer Center does not appear to meet NRHP/CRHR Criterion A/1 because it has no direct association with significant events or trends in history. Construction of this facility began in ca. 1948 during a period when the CAL FIRE was already an established agency with many such facilities located throughout California. Research does not support that this particular facility played an important role in the history of CAL FIRE or their work. There is also no significance for its association with the CCC. Because the property served as a CAL FIRE facility for approximately 30 years before becoming jointly operated with the CCC, it is associated with many different individuals. Research, however, did not reveal that these individuals made significant contributions to history that would qualify the property under NRHP/CRHR Criterion B/2. Therefore, it does not appear to meet this criterion. Architecturally, the property lacks architectural distinction as individual buildings and as a potential district. The buildings are all modest examples of their type and do not have a discernable architectural style. Rather they are common examples of buildings constructed more for function than aesthetics. Research also did not reveal that the buildings were designed by a master architect. For these reasons, the property does not appear to meet NRHP/CRHR Criterion C/3. Under NRHP/CRHR Criterion D/4, the property does not appear likely to yield information important to history because it is not the principal source of important information.

In addition to lacking historical and architectural significance, the property has lost integrity. The design of the property was altered when additions were made to Buildings 3, 4, and 8. These additions enlarged the buildings and altered the massing of these buildings. The additions to these buildings also altered integrity of materials with the introduction of non-historic fabric. The integrity of workmanship was altered when the buildings received additions and replacement windows.

The property does not appear to meet the criteria for a Landmark. It is not the first, last, or most significant property of its type. In fact, there were many CAL FIRE facilities like this one throughout California. The property is not associated with individuals that had a profound influence on the history of California. Nor is the property's association with CAL FIRE significant enough to meet this criterion as a Landmark. Finally, the property is not a prototype of, or an outstanding example of a period, style, architectural movement or construction for the same reasons as noted above for NRHP/CRHR Criterion C/3. It is also not a notable work or the best surviving work of a pioneer architect, designer, or master builder.

Significance (cont)

In summary, the property does not appear eligible for the NRHP, CRHR or as a Landmark. It not considered a historical resource under CEQA and is not recommended for inclusion in the State's Master List.

References (cont)

California Conservation Corps (CCC). 1978. *Public Service Conservation Work November 1976-June 1978*. Available at the California State Library.

_____. 1983. *The C's: The Greater Their Reach, the Higher They Climb….* Available at the California State Library.

_____. 2015a. "A Brief History…" Available at http://www.ccc.ca.gov/about/glance/Pages/CCCHistory.aspx, accessed October.

_____. 2015b. "A Few Facts and Stats About the CCC." Available at http://www.ccc.ca.gov/about/glance/Pages/factsStatistics.aspx, accessed October.

_____. 2015c. "The Placer Center." Available at http://www.ccc.ca.gov/locations/Placer/Pages/placer.aspx, accessed October.

Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Grace, Rensch, Willim N. Abelow, and Douglas E. Kyle. 1990. *Historic Spots in California*. Stanford University Press, Stanford, CA.

Thornton, Mark V. 1994. *A Survey of Historic Significance Evaluation of the CDF Building Inventory*. Prepared for California Department of Forestry and Fire Protection. CDF Archaeological Reports Number 17, Volume 1 of 2.

Photographs (cont)

Photograph 2. Building 1, south and east elevations, camera facing northwest

Photographs (cont)

Photograph 3. Building 1's west elevation showing shed roof addition, original sliding doors and steel-frame window, and replacement paneled door.

Photograph 4. Building 2, west and south elevations, camera facing northeast.

Photographs (cont)

Photograph 5. Building 2, east and north elevations, camera facing southwest

Photograph 6. Building 3, west and south elevations, camera facing northeast.

Photographs (cont)

Photograph 7. Building 3, north addition, camera facing east.

Photograph 8. Building 4's south elevation, camera facing northwest

Photographs (cont)

Photograph 9. Building 4's north elevation overview showing wings

Photograph 10. Building 4, center wing on north elevation, camera facing southwest

Photographs (cont)

Photograph 11. Building 4's wing addition on north elevation, camera facing southeast

Photograph 12. Building 5, camera facing southwest

Photographs (cont)

Photograph 13. Building 6, camera facing northwest.

Photograph 14. Building 7, camera facing southeast

Photographs (cont)

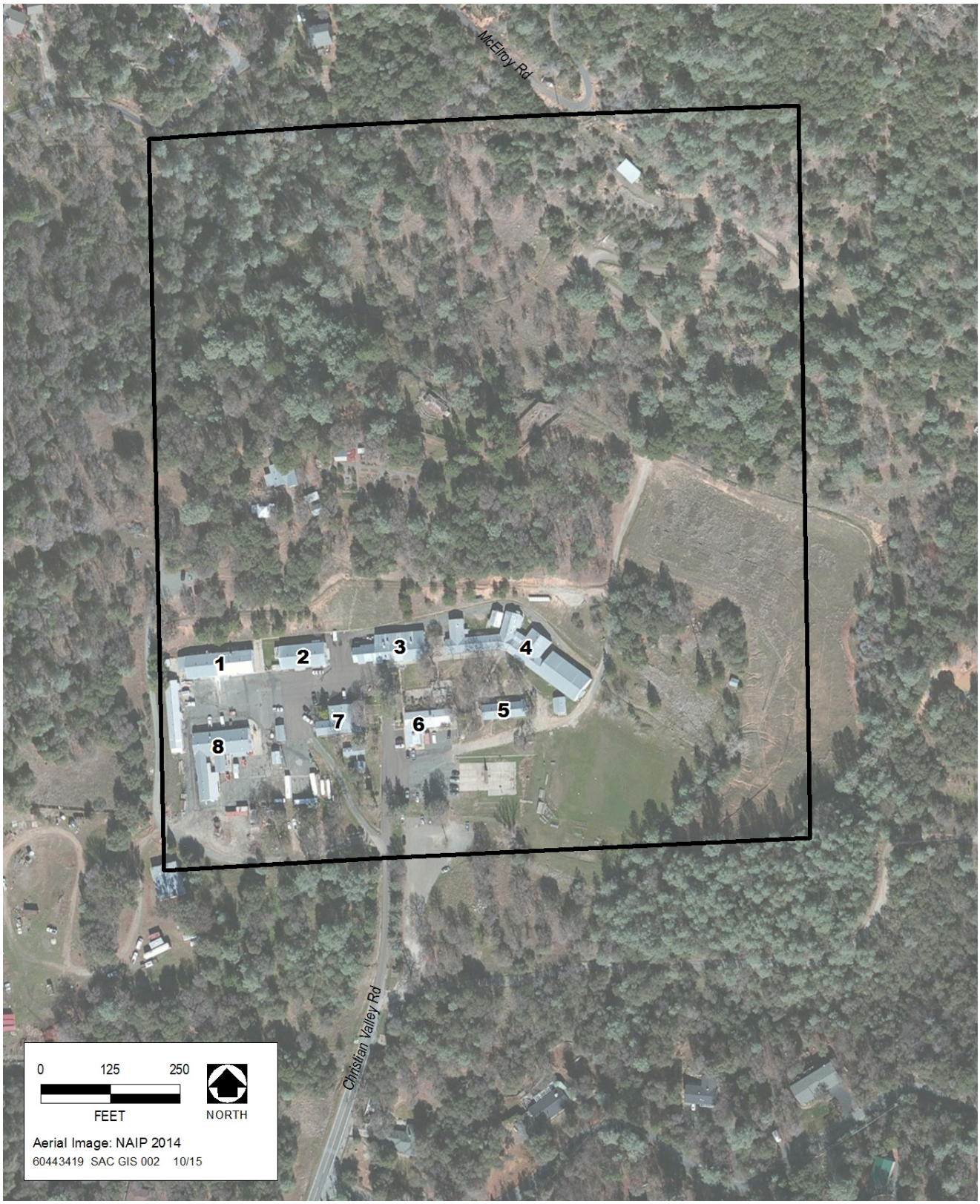
Photograph 15. Building 8, camera facing southwest

Photograph 16. Building 8, ramada and addition, camera facing west

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # _____
HRI # _____
Trinomial _____

*Resource Name or # (Assigned by recorder) Placer Center
*Drawn by AECOM
*Date October, 2015



*Required Information

*Recorded by: Kara Brunzell *Date: 1/28/2016 ☒ Continuation ☐ Update

Description

The Water Tank, Building 9, is located roughly 750 feet north of the cluster of 15 buildings at the end of Christian Valley Road that forms the main area of the Placer Center complex. The small, single-story building is rectangular in plan with a shed roof of corrugated metal. The building rests on a concrete slab foundation. It is built into a hillside so that its main (southwest) elevation is shorter than the rear (northeast) elevation. The lower portion of the building (adjacent to the dirt road that runs to its southwest) is constructed of concrete, while the rear is clad in horizontal wood boards. There is an entryway centered on the southwest elevation that is sheltered by the roof. There is a secondary entryway fitted with a wood door at the center of the rear (northeast) elevation. The northeast elevation also has a large box for services which is topped with an antenna installed on its wall. There is an exterior concrete staircase at the southeast elevation. Its lower flight leads toward the building along a concrete retaining wall, and terminates in a landing adjacent to the building. A longer upper flight leads alongside the building to the hilltop.

Significance

The Placer Center property was evaluated in September 2015 and found to lack architectural or historical significance. It is therefore ineligible for historic listing at the national, state, or local level. The proposed project did not at that time include the Water Tank area, and it was not evaluated along with the other buildings on the property. It was constructed between 1948 and 1952, along with the first 8 buildings on the property (NETR Historic Aerials). Little is known about the specific history of the building, but it appears to have sheltered water tanks over the intervening decades. It also appears to have undergone alterations over the years, particularly at the rear.

The Placer Center, with which the Water Tank is associated, is not historically significant. The Water Tank also lacks an association with any significant historic events, and is therefore ineligible for NRHP, CRHR, or local listing under Criterion A/1. It is not associated with persons important to our history and is therefore ineligible for NRHP, CRHR, or local listing under Criterion B/2. It is a utilitarian building that lacks architectural or design distinction, and has been altered over the years, and is therefore ineligible for NRHP, CRHR, or local listing under Criterion C/3. In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies and be significant under Criterion D/4. The Water Tank does not appear to be a principal source of important information in this regard.

References

NETR Online, Historic Aerials, National Environmental Title Research, LLC, 2009 – 2016, http://www.historicaerials.com/, Accessed 28 January 2016.

Photographs are courtesy Steve Fultz, CCC Project Manager, December 21, 2015.

Photographs

Photograph 1: Water Tank, southwest and southeast elevations, camera facing north.

Photograph 2: Water Tank, northwest and southwest elevations, camera facing southeast

Photograph 3: Water Tank, northwest and northeast elevations, camera facing south.

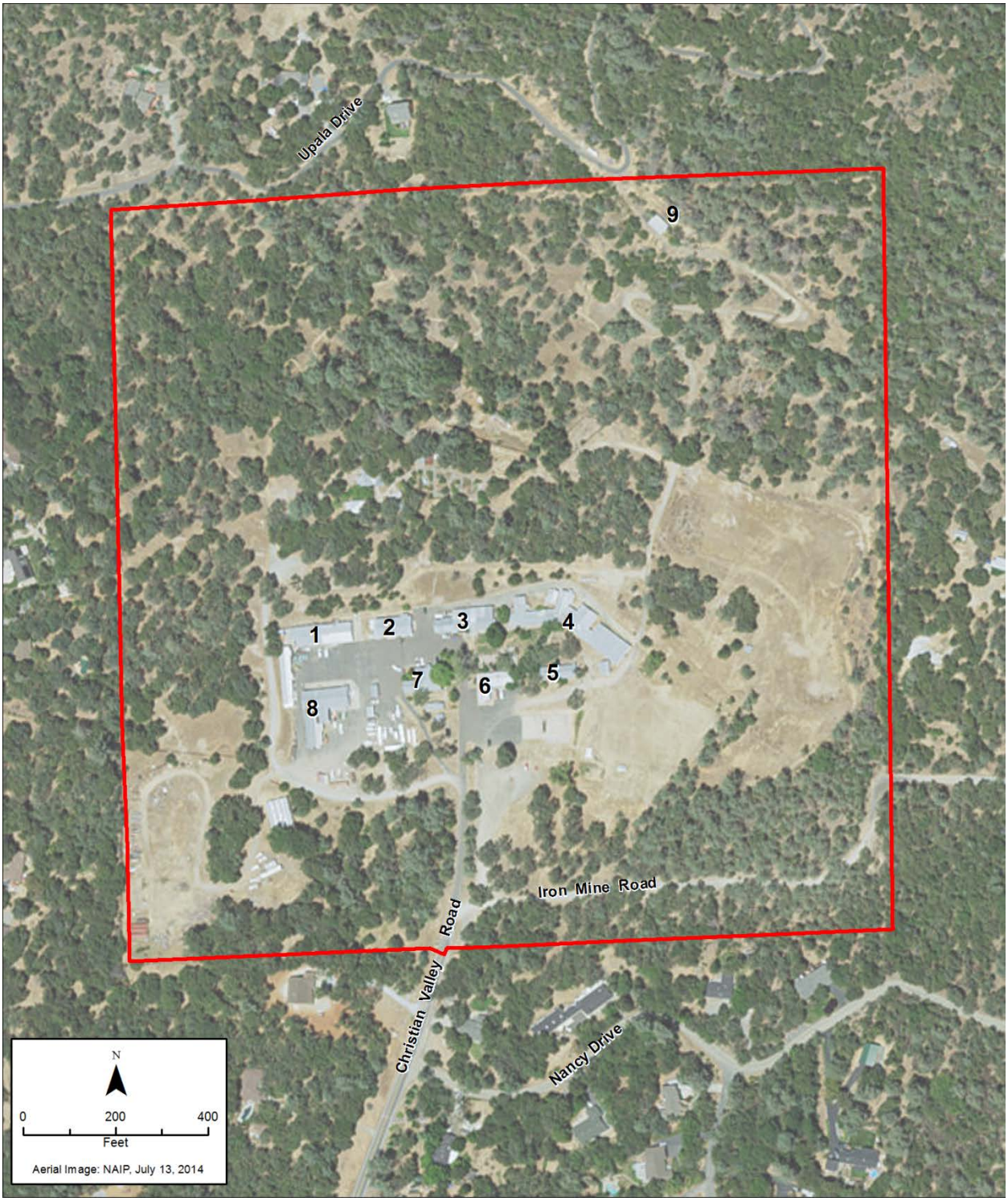
State of California ◆ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

Primary #
HRI#
Trinomial

Page 4 **of** 4 ***Resource Name or #** (Assigned by recorder) Placer Center

***Drawn by:** Horizon Water & Environment ***Date of map:** 02/01/2016



DPR 523K (Rev. 1/1995)(Word 9/2013) NOTE: Include bar scale and north arrow.

Appendix D
Noise Analysis

Noise Calculations for the CCC Placer Center Project

Construction Equipment 1 (impact hammer)	90	dBA at 50 feet
Construction Equipment 2 (scraper)	89	dBA at 50 feet

Combined Noise at 50 feet (Ltotal at 50 feet) 92.5 dBA

Ltotal=10 log(10^L1/10+10^L2/10)

Distance (feet) from Middle of Project Site to Sensitive Receptors	Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
50	92.5	
100	86.5	
200	80.5	
250	78.6	
300	77.0	
400	74.5	
490	72.7	Placer Nature Center
528	72.1	Nearest Residence
600	71.0	
750	69.0	
1000	66.5	
1190	65.0	
2000	60.5	
2500	58.6	
3000	57.0	
3500	55.6	
4000	54.5	

Placer County Noise Threshold Limits and Distances from Project Site to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq (dBA)	Treshold Level - Lmax	Distance to Leq Threshold from Middle of Project Site (feet)	Distance to Lmax Threshold from Middle of Project Site (feet)
Residential Daytime Limit (7 am-10pm)	55	70	3,766.4	669.8
Nighttime Limit (10pm -7am)	45	65	11,910.3	1,191.0

Source: Placer County Noise Ordinance, County Code Article 9.36 Noise.

Nearest Sensitive Receptors and Distances from Middle of Nearest Work Area

Sensitive Receptor	Distance (feet)
Residences on Nancy Drive in Auburn	528

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Impact Hammer	0.089	87

Vibration Calculations with Equations for Vibration-Causing Equipment (use of impact hammer/hoe ram)

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	20.5	Building damage threshold
Lvd=Lvref-30log(D/25)	135.3	residential, human perception threshold
	62.8	institutional threshold

Blasting Noise Calculations

Construction Blasting	94	dBA at 50 feet	(FHWA 2009)

Distance (feet) from Middle of Project Site to Sensitive Receptors	Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
50	94.0	
100	88.0	
200	82.0	
250	80.0	
300	78.4	
400	75.9	
490	74.2	Placer Nature Center
528	73.5	Nearest Residence
600	72.4	
750	70.5	
1000	68.0	
1415	65.0	
2000	62.0	
2500	60.0	
3000	58.4	
3500	57.1	
4000	55.9	

Placer County Noise Threshold Limits and Distances from Project Site to those Limits from Blasting

Noise Threshold	Threshold Level - Leq (dBA)	Treshold Level - Lmax	Distance to Leq Threshold from Middle of Project Site (feet)	Distance to Lmax Threshold from Middle of Project Site (feet)
Residential Daytime Limit (7 am-10pm)	55	70	4,456.3	792.4
Nighttime Limit (10pm -7am)	45	65	14,091.9	1,409.2

Vibration Source Levels for Blasting (FTA 2006)

Equipment	PPV at 50 feet	VBA at 50 feet
Blasting	NA	100

Vibration Calculations with Equations for Vibration from blasting

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (50/d)^1.5	NA	Building damage threshold
Lvd=Lvref-30log(D/50)	733.9	residential, human perception threshold
	340.6	institutional threshold

Appendix E

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the California Conservation Corps, Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement Project (Project) Initial Study/Mitigated Negative Declaration (IS/MND). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed.

ACRONYMS AND ABBREVIATIONS (FOR APPENDIX E)

BMPs	best management practices
Cal/OSHA	California Division of Occupational Safety and Health
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CO	carbon monoxide
CRHR	California Register of Historical Resources
IS/MND	initial study/mitigated negative declaration
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
mph	miles per hour
NAHC	Native American Heritage Commission
NOx	nitrous oxides
Phase I ESA	Phase I Environmental Site Assessment
PCAPCD	Placer County Air Pollution Control District
PM	particulate matter
Project	Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement Project
ROG	reactive organic gases
USFWS	U.S. Fish and Wildlife Service
§	section
VOC	volatile organic compound

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Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Air Quality					
AQ-1	**Use Low VOC paints.** The State or its contractor(s) will use low VOC paints on all interior and exterior architectural coated surfaces. The paints will have a VOC content less than or equal to 100 grams per liter. This applies to applications during initial construction and future applications.	1. Confirm that measure is included in plans and specifications. 2. Confirm low VOC paints are used by contractor.	1. The State 2. The State	1. During development of the plan and specifications 2. During construction	

AQ-2	**Prepare and Implement Dust Control Plan and Best Management Practices for Construction Air Quality.** The construction contractor will prepare a dust control plan that will be approved by the PCAPCD prior to the start of any construction activities. The dust control plan will implement the following best management practices and any other measures contained in the final approved dust control plan to reduce fugitive dust emissions and construction equipment emissions during construction to the extent feasible: ▪ All exposed areas of bare soil (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered once per day or as needed to minimize fugitive dust emissions. ▪ All haul trucks transporting soil, sand, or other loose material off-site shall be covered. ▪ All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power-vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. ▪ All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). ▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 California Code of Regulations [CCR] Section 2485). Clear signage regarding this requirement shall be provided for construction workers at all access points. ▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's	1. Confirm that the dust control plan is incorporated into the project plans and specifications, and prepared by the contractor. 2. Implement the dust control plan and other BMPs. 3. Confirm that the dust control plan is implemented properly. 4. Respond to any dust complaints.	1. The State 2. Contractor 3. The State 4. The State	1. During development of the plan and specifications 2. During construction 3. During construction 4. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
	specifications. All equipment shall be checked by a certified visible emissions evaluator. ▪ During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators. ▪ The contractor will use construction equipment that minimizes air emissions to the extent feasible such that overall fleet emissions are equal to or less than emissions compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. ▪ A publicly visible sign shall be posted with the name and telephone number of the contact person at the lead agency regarding dust complaints. This person shall respond to any complaints and take corrective action within 48 hours. The PCAPCD's phone number shall also be visible to ensure compliance with applicable regulations.				

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
AQ-3	**Limit Emissions from Controlled Blasting.** The site will limit the amount of blasting to 1 acre or implement other equally effective PM emission reduction control measures such that PM emissions are below the 82 pounds per day threshold. In addition, the facility will ensure that detonation emissions of other criteria pollutants will not result in emissions above the threshold in particular for CO and NOx once the amount of detonation material is known. If necessary, during days of detonation, other activities may be phased so that activity remains below the daily thresholds. The facility will comply with all permit conditions from the California Division of Industrial Safety.	1. Confirm that the measure is incorporated into the project plans and specifications. 2. Ensure that detonation emissions of criteria pollutants remain below daily thresholds.	1. The State 2. Contractor	1. During development of the plan and specifications 2. During construction	

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
AQ-4	**Construction ROG and NOx Cumulative Effect Reductions.** The State or its contractor(s) shall implement one or more of the following strategies to ensure that during project construction, emissions don't contribute to a violation of the ozone standard: ▪ Do not conduct construction activities on days designated by PCAPCD as "Spare the Air" days. This will ensure the project is not emitting ROG or NOx emissions on the most critical days for potential ozone standard exceedances. ▪ The contractor will use construction equipment that minimizes air emissions to the extent feasible such that overall fleet emissions are equal to or less than emissions compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. This measure would be implemented in conjunction with at least one of the other strategies identified in this mitigation measure. ▪ Contribute to the PCAPCD's offset mitigation program to pay to offset the total construction NOx and ROG emissions in tons. This program is operated by PCAPCD who is responsible for finding suitable projects for funding and certifying that the mitigation has been completed. The amount of offsets are based on the actual emissions emitted during construction.	1. Confirm that the measure is incorporated into the project plans and specifications. 2. Confirm that strategies are implemented to ensure that emissions do not contribute to violation of the ozone standard.	1. The State 2. The State or its contractor	1. During development of the plan and specifications 2. During construction	
Biological Resources					

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
BIO-1	**Perform Nesting Bird Surveys** If vegetation removal or ground disturbance are initiated during the nesting season (typically February 15 to September 1), a focused survey for active bird nests shall be conducted by a qualified biologist within 15 days prior to the beginning to construction activities. If nesting birds are detected, a no-disturbance buffer shall be established around the nest. Buffers shall be 500 feet for non-listed raptors and 100 feet for non-listed passerines. A qualified biologist may identify an alternative buffer based on a site specific-evaluation and in consultation with CDFW. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival. If listed species are detected, the Lead Agency shall consult with CDFW and the USFWS regarding appropriate action.	1. Retain a qualified biologist to conduct pre-activity surveys. 2. Conduct pre-activity surveys of construction work area within 15 days before construction activity. 3. If active nests are identified, establish no-disturbance buffers. 4. If listed species are detected, contact USFWS and CDFW regarding appropriate action.	1. The State 2. The State 3. The State 4. The State	1. Before construction 2. Before construction 3. Before construction 4. Before or during construction	

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Cultural Resources					
CR-1	**Conduct archaeological sensitivity training and construction monitoring.** Prior to initiation of ground-disturbing activities, the State shall arrange for construction crews to receive training about the kinds of archaeological materials that could be present within the project site and the protocols to be followed should any such materials be uncovered during construction. Training will be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards. Training may be required during different phases of construction to educate new construction personnel. A qualified archaeological monitor will be retained to monitor all ground disturbing activities associated with the project, from demolition through the installation of building foundations, utility trenching, and grading. A Native American monitor will also be retained to be present during ground disturbing activities. If any prehistoric or historic-era features, or human remains, are exposed during construction, the archaeological monitor will have the authority to stop work in the vicinity of the finds and implement the Unanticipated Discoveries Plan and other actions identified in Mitigation Measure CR-2.	1. Retain a qualified archaeologist to conduct worker training and to monitor ground disturbing activities. 2. Conduct construction crew training regarding archaeological materials that could be present in the project area. 3. Ensure a qualified archaeological monitor monitors all ground disturbing activities. 4. In the event that cultural resources are encountered, ensure Mitigation Measure CR-2 is implemented.	1. The State 2. The State 3. The State 4. The State	1. Before construction 2. Before construction 3. During construction 4. During construction	

CR-2	**Develop an Unanticipated Discoveries Plan, immediately halt construction if cultural resources are discovered, evaluate all identified cultural resources for eligibility for inclusion in the CRHR, and implement appropriate mitigation measures for eligible resources.** An Unanticipated Discoveries Plan will be developed by the State prior to initiating construction. The Unanticipated Discoveries Plan will outline protocols to be followed should there be unanticipated archaeological finds, provide for points of contact, and present a timeline for notifications and development of a work plan to evaluate the finds. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work will be suspended immediately at the location of the find and within a radius of at least 50 feet, and the lead agency will be contacted. The discovered items will be recorded with photography, measurements, and GPS data, as appropriate. All cultural resources accidentally uncovered during construction within the project site will be evaluated for eligibility for inclusion in the CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in Public Resources Code § 5024.1 or CEQA § 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines § 15126.4(b) before construction resumes. For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the	1. Prepare an Unanticipated Discoveries Plan 2. In the event that any cultural resources are encountered, ensure that work stops immediately. 3. Confirm that any unanticipated discoveries are evaluated and addressed appropriately.	1. The State 2. Contractor 3. The State	1. Before construction 2. During construction 3. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
	site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources will be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation will be required if an archaeological site is determined to be a TCR. Implementation of the approved mitigation will be required before resuming any construction activities with potential to affect identified historical resources at the site.				

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
CR-3	**Immediately halt construction if paleontological resources are discovered, evaluate the significance of the resources, and implement appropriate mitigation measures as necessary.** Paleontological resources are not necessarily visible on the ground surface. As a result, prior to initiation of ground-disturbing activities, construction crews will receive training about the kinds of paleontological materials that could be present within the project site and the protocols to be followed should any such materials be uncovered during construction. Training will be conducted by a professional paleontologist. Training may be required during different phases of construction to educate new construction personnel. If any items of paleontological interest are accidentally discovered during construction, work will be immediately suspended within 50 feet of the discovery site and the lead agency will be contacted. Any accidental discovery of paleontological resources during construction will be evaluated by the qualified paleontologist. If it is determined that the Proposed Project could damage a unique paleontological resource, as defined in the CEQA Guidelines, mitigation will be implemented in accordance with CEQA § 21083.2 and § 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist will develop a treatment plan in consultation with the lead agency. Work will not be resumed until authorization is received from the lead agency and any recommendations received from the qualified paleontologist are implemented.	1. Retain a professional paleontologist to conduct worker training. 2. Conduct construction crew training regarding paleontological resources that could be present in the project area. 3. In the event that any paleontological resources are encountered, ensure that work stops immediately. 4. Confirm that any unanticipated discoveries are evaluated and addressed appropriately.	1. The State 2. The State 3. The State 4. The State	1. Before construction 2. Before construction 3. During construction 4. During construction	

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
CR-4	**Immediately halt construction if human remains are discovered and implement applicable provisions of the California Health and Safety Code.** If human remains are accidentally discovered during the project's construction activities, the requirements of California Health and Human Safety Code § 7050.5 will be followed. Potentially damaging excavation activities will halt in the area of the remains, with a minimum radius of 100 feet, and the County Coroner will be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code § 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (Health and Safety Code § 7050[c]). Pursuant to the provisions of Public Resources Code § 5097.98, the NAHC will identify a Most Likely Descendent (MLD). The MLD designated by the NAHC will have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The project proponent will work with the MLD to ensure that the remains are removed to a protected location and treated with dignity.	1. Confirm that measure is included in project plans and specifications. 2. In the event that human remains are encountered, halt work and contact the Placer County Coroner. 3. Confirm that any discoveries of human remains are evaluated and addressed properly.	1. The State 2. The State 3. The State	1. During preparation of plans and specifications 2. During construction 3. During construction	
Geology, Soils and Seismicity					

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
GEO-1	**Implement Best Management Practices for Erosion Control** The State and/or its contractor(s) will implement site-specific BMPs during construction activities, which may include but would not be limited to: ▪ Practices to reduce erosion of exposed soil, including stabilization of soil stockpiles, watering for dust control, establishment of perimeter silt fences, and/or placement of fiber rolls; ▪ Minimization of soil disturbance area; ▪ Limitation of construction to dry periods to the extent feasible; ▪ Revegetation of disturbed areas.	1. Ensure that BMPs are incorporated into the project plans and specifications. 2. Confirm that BMPs are implemented.	1. The State 2. The State or its contractor	1. During preparation of plans and specifications 2. During construction	
GEO-2	**Remove and Re-compact Existing Fill Material under Proposed Building Pads During Site Grading** During site grading, the construction contractor(s) shall remove existing fill material below proposed building pads to a depth where soil of adequate compaction for engineering/building stability is reached based on the results of the Project's geotechnical report and any supplemental data. If determined to be suitable for reuse, removed fill material shall be re-conditioned/re-compacted to design specifications.	1. Confirm that measure is included in project plans and specifications. 2. Ensure that existing fill below building pads is removed, and re-compacted if suitable.	1. The State 2. The State	1. During development of plans and specifications 2. During construction	
Hazards and Hazardous Materials					

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
HAZ-1	**Conduct Hazardous Materials Abatement by Licensed Contractor(s)** Hazardous materials abatement activities during Project construction will be conducted by a licensed contractor(s). Specifically, removal of all asbestos-containing building materials shall be conducted by a licensed contractor registered with Cal/OSHA. Such asbestos-containing building materials shall be removed prior to demolition and shall be disposed of following federal and state regulations. All paints at the site shall be treated as lead-containing for purposes of determining the applicability of Cal/OSHA lead standards during maintenance, renovation, and demolition activities. Universal wastes or suspected hazardous materials (e.g., florescent light fixtures, household chemicals, automotive batteries, etc.) will be removed, recycled, and/or disposed of at an appropriate waste facility by a contractor(s) licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.	1. Review and approve construction plans and specifications to confirm that measure is included. 2. Ensure a licensed contractor conducts all hazardous materials abatement.	1. The State 2. The State	1. During development of plans and specifications 2. During construction	

HAZ-2	**Prepare and Implement a Blasting Plan** If blasting is deemed necessary for the construction of Proposed Project components, the State or its contractors will conduct a pre-blast survey, prepare a blasting plan, and implement the plan throughout the Proposed Project's construction period. A written report of the pre-blast survey and final blasting plan will be provided to the appropriate regulatory agency and approved prior to any rock removal using explosives. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan will meet the following conditions to fully minimize hazard- and noise-related impacts of blasting activities: ▪ The pre-blast survey will be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by the State. Notification that blasting will occur will be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey will be included in the final blasting plan. Precautions such as fencing or taping will be incorporated that limit access by users of the Placer Nature Center and/or the general public. ▪ The final blasting plan will address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan will meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement. To support a more detailed noise and vibration analysis of the blasting activities, the plan shall include detailed blast information	1. Conduct a pre-blast survey. 2. Prepare a blasting plan. 3. Ensure the pre-blast survey and final blasting plan are provided to the appropriate regulatory agency. 4. Ensure the blasting plan is implemented.	1. The State or contractor 2. The State or contractor 3. The State or contractor 4. The State or contractor	1. Before construction 2. Before construction 3. Before construction 4. During construction	

	such as a recommended maximum charge weight, frequency and schedule of blasting, location of blasting, and any other necessary information. ▪ The blasting plan will outline the anticipated blasting procedures for the removal of rock material at the project site. The blasting procedures will incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The State, or its construction contractor will keep a record of each blast for at least one year from the date of the last blast. ▪ Appropriate noise and vibration modeling will be performed as part of the plan preparation to confirm the resulting noise and vibration levels at the nearest local sensitive receptors. ▪ The plan will require appropriate noise and vibration mitigation measures as described below and appoint a noise disturbance coordinator. The noise disturbance coordinator will have the authority to modify the construction schedule and mitigation measures. The public will be notified of the schedule for construction activities expected to produce high levels of noise and vibration, and all resident complaints will be responded to. Mitigation measures to be implemented will include but not be limited to: A) Restrict blasting charge weight to appropriate levels determined in the blasting plan to prevent damage to buildings. B) Install temporary noise barriers to block the path from construction noise sources to receivers (residences within				

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
	1,000 feet of the project site). This measure will be effective only if the barrier is near the source or the receiver. C) If blasting-related noise and vibration levels at local sensitive receptors cannot be fully mitigated by the measures described above as confirmed in the blast plan's noise and vibration modeling, blasting will not be performed at the project site and other methods (such as use of an impact hammer) will be performed instead.				

HAZ-3	**Prepare and Implement a Construction Traffic Management Plan.** The construction contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. In developing and implementing this plan, the construction contractor shall coordinate with the County of Placer. The plan shall include, but will not be limited to, the following: ▪ Identification of construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the contract documents. ▪ Implementation of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs (if required), lane closure procedures (if required), and cones for drivers. Traffic control measures shall follow the standards and specifications contained in the *California Manual on Uniform Traffic Control Devices* (Caltrans 2014). ▪ Evaluation of the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period. ▪ Notification of adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures. ▪ Development of a process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager. 24-hour contact information for the complaint manager shall be posted on-site.	1. Review and approve construction plans and specifications to confirm that measure is included. 2. Review and approve Construction Traffic Management Plan. 3. Implement plan.	1. The State 2. The State 3. Contractor	1. During development of plans and specifications 2. Before start of construction 3. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ Documentation of road pavement conditions for all routes that would be used by construction vehicles before and after Project construction. Make provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before Project construction.				

	Mitigation Measure	Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Noise					
NOI-1	**Use Sound Attenuation Devices on Construction Vehicles.** All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for those types of equipment.	1. Confirm that measure is included in plans and specifications. 2. Confirm that sound attenuation devices are used in accordance with the measure.	1. The State 2. Contractor	1. During preparation of plans and specifications 2. During construction	
NOI-2	**Shut Off Equipment When Not in Use.** Mobile noise-generating equipment and machinery shall be shut off when not in use.	1. Confirm that measure is included in plans and specifications. 2. Confirm that machinery is shut off when not in use.	1. The State 2. Contractor	1. During preparation of plans and specifications 2. During construction	
Public Services					
PUB-1	**Maintain Onsite Water Supplies throughout Construction.** The State or its construction contractor shall ensure that onsite water supplies remain available throughout the Project's entire construction period for fire-fighting purposes. As appropriate, onsite water sources may include the existing tank, the proposed tank, potable water supplies, or a temporary water storage tank. Any of these water sources must be capable of supplying sufficient quantities of water to fire fighters in the event of a fire.	1. Confirm that measure is included in plans and specifications. 2. Confirm that sufficient water supplies are maintained on-site.	1. The State 2. Contractor or the State	1. During preparation of plans and specifications 2. During construction	