DRAFT

Initial Study and Mitigated Negative Declaration Butte Fire Station and Unit Headquarters Replacement Project

December 2014

Lead Agency:

State of California
Dept. of Forestry and Fire Protection (CAL FIRE)
1419 9th Street, Sacramento, CA 94244

Prepared For:

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DRAFT MITIGATED NEGATIVE DECLARATION BUTTE FIRE STATION AND UNIT HEADQUARTERS REPLACEMENT PROJECT

Lead Agency: State of California Department of Forestry and Fire Protection (CAL FIRE)

Project Proponent: State of California Department of General Services – Real Estate Services Division

Project Location: The Project is located at the Butte Fire Station and Unit Headquarters (Butte FS and UHQ) in the City of Oroville, Butte County, California at 176 Nelson Avenue, Oroville, California 95965.

Project Description: The Proposed Project would consist of demolition of the existing Butte FS and UHQ and construction of the new Butte FS and UHQ at the same location.

Demolition of Existing Butte Fire Station and Unit Headquarters

Site demolition would include all buildings on-site except for the two Emergency Command Center (ECC) buildings and the ECC tower located in the northeast corner of the Project site. In addition to building demolition, the existing hose rack, fuel tanks and propane tanks, all existing utilities and appurtenances including water distribution lines, sewer lines, and gas lines, and existing concrete retaining walls, asphalt concrete paving and concrete sidewalks would be removed. A utility pole located on the eastern boundary would also be relocated. Lastly, clearing, grubbing, and tree removal would occur as required within the limits of the Project site.

New Butte Fire Station and Unit Headquarters

After demolition, a new fire station and unit administrative headquarters complex would be constructed. New facilities would include: administrative building, three-bay fire apparatus building, 20-bed barracks/mess hall, warehouse/service center, two-bay dozer shed, auto shop, covered vehicle wash rack with filtration system, maintenance support building, physical fitness building, a generator/storage building, a fire pump test pit and several other site improvements.

Other Site Improvements

A six-foot high chain link fence with barbed wire would be installed around portions of the perimeter, with sliding auto gates at all entrances/exits. A free-standing fuel island would be located north of the warehouse/service center and would contain an 8,000-gallon tank, split for 4,000 gallons of diesel and 4,000 gallons of unleaded gasoline, and one 500-gallon, above-ground tank for E-85 ethanol. A 10,000-gallon, three-chambered fire pump test pit would be located in the northwestern portion of the site in between the vehicle wash rack and the auto shop. A 60-foot-long hose rack would be installed north of the administrative building and a new foundation for a radio tower would be located adjacent to the apparatus bay on the west. Other site improvements would include new landscaping and irrigation, pole mounted site lighting and signage.

Utilities

New domestic and fire water distribution systems would be installed from the existing public systems in Nelson Avenue. Domestic and fire water connections are required for each building, and fire

hydrants would be spaced throughout the Project site. Water service would be provided by Thermalito Water and Sewer District (TWSD). New wastewater collection systems would be installed from the existing public systems in Nelson Avenue. Sewer service would be required for each building and would be provided by the City of Oroville. A new storm water collection system would be installed. The system would include an underground storm drain, drain inlets, drains connecting to building and downspouts, and a connection to the existing drainage system provided by the City of Oroville.

New underground electrical and telephone distribution systems would be installed in Nelson Avenue. The electrical systems would be extended from the new main switchboard at the generator/storage building to each building. Electricity service would be provided by Pacific Gas and Electric (PG&E). Telephone systems would originate at the new minimum point of entry (MPOE) at the administrative building and would connect to each building. Telephone service would be provided by American Telegraph and Telephone Company (AT&T). In addition, new underground raceways for electrical, lighting controls, security, fire alarm, and telephone/data systems would be installed. A new propane tank for the emergency generator and a new natural gas distribution system from the public utility located in Nelson Avenue would also be installed. Natural gas service would be provided by PG&E.

Grading and Paving

The site would first have a rough grade to level areas for the buildings, paving, and flatwork. New concrete paving for access drives and parking areas would be installed. New curbs, gutters, and sidewalks would be installed throughout the site and along Nelson Avenue and Del Oro Avenue. Five new retaining walls would be installed throughout the site. The first would be along the southern boundary of the site between the two entrances/exits off Nelson Avenue, the second also along the southern boundary from the central entrance/exit to the barracks, the third along the north side of the warehouse/service center and the administrative building, the fourth along the south side of the ECC Tower and ECC Buildings, and the fifth along the northern boundary from the vehicle wash rack to the generator/storage building. In addition, several temporary and permanent erosion control and sediment control measures would be installed throughout the site.

Proposed Finding: Based on the information contained in the attached Initial Study, CAL FIRE finds that there would not be a significant effect to the environment because the mitigation measures described herein would be incorporated as part of the Proposed Project.

Public Review Period: December 12, 2014 to January 12, 2015

Mitigation Measures Incorporated into the Project to Avoid Significant Effects

Aesthetics

Currently, the existing Butte FS and UHQ operates 24 hours per day, seven days a week and has exterior lighting. The Proposed Project may result in a change to the lighting pattern due to changes to building configuration and landscaping on-site, which could result in impacts to residential homes along Del Oro Avenue and north of the Project site. In addition, the flood lighting from the dozer shed may adversely affect residential homes located along Del Oro Avenue. In order to minimize light spillage onto the adjacent residential properties along Del Oro Avenue and north of the Project site, a lighting plan shall be developed describing specific measures regarding light shielding. Implementation of Mitigation Measure AES-1 would reduce potential adverse impacts to a less than significant level.

Mitigation Measure

AES-1 Lighting Plan

A. Prior to construction, a lighting plan for the Project site specifying the location and type of exterior light sources shall be prepared and submitted to CAL FIRE and DGS for approval. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the eastern boundary and on the northern boundary of the Butte FS and UHQ property.

Air Quality

The maximum amount of Reactive Organic Gases (ROG) emissions would occur during the Architectural Coating phase of construction. The ROG emissions during this phase are largely due to evaporation of ROG from the architectural coating (i.e., paint). To reduce the amount of ROG emissions during the Architectural Coating phase from the Butte County Air Quality Management District's (AQMD) Level B range to the Level A range, Mitigation Measure AQ-1 shall be implemented. With the implementation of Mitigation Measure AQ-1 the maximum daily amount of ROG emissions would be 18.51 pounds per day (ppd), which would be in the Level A range.

Mitigation Measures

AQ-1 Apply Low Volatile Organic Compound Architectural Coatings

A. During construction, use architectural coatings with low volatile organic compound (VOC) content. The project-wide average VOC content of architectural coatings should be 50 grams per liter (g/l) or less.

According to the Butte County AQMD *CEQA Air Quality Handbook* (CEQA Handbook), all projects are considered either potentially significant or significant. Thus, the Proposed Project is considered to have a potentially significant construction-related impact on criteria pollutant emissions. To further reduce construction-related ROG, NOx, and PM_{10} emissions to a less than significant level mitigation must be implemented. Implementation of Mitigation Measure AQ-2 would reduce construction-related ROG, NOx, and PM_{10} emissions to a less than significant level.

AQ-2 Standard Construction-Related Mitigation Measures

A. Maintain all construction equipment in proper tune according to manufacturer's specifications

B. Maximize to the extent feasible, the use of diesel construction equipment meeting the California Air Resources Board's (CARB) 1996 or newer certification standard for off-road heavy-duty diesel engines.

C. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emissions.

D. Haul vehicles transporting soil into or out of the property shall be covered.

E. A water truck shall be on site at all times. Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary.

F. On-site vehicles limited to a speed that minimizes dust emissions on unpaved roads.

G. Haul roads shall be sprayed down at the end of the work shift to form a thin crust. This application of water shall be in addition to the minimum rate of application.

H. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the District shall also be visible to ensure compliance with District Rule 200 & 205 (Nuisance and Fugitive Dust Emissions).

I. All visibly dry disturbed soil surface areas of operation shall be watered to minimize dust emission.

J. Existing roads and streets adjacent to the project will be cleaned at least once per day unless conditions warrant a greater frequency.

K. All visibly dry disturbed unpaved roads surface areas of operation shall be watered to minimize dust emissions. Unpaved roads may be graveled to reduce dust emissions.

M. Construction workers shall park in designated parking areas(s) to help reduce dust emissions.

N. Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material may be required to further reduce dust emissions.

According to the Butte County AQMD CEQA Handbook, all projects are initially considered either potentially significant or significant. Therefore, the Proposed Project is considered to have a potentially significant long-term operational impact on criteria pollutant emissions. The CEQA Handbook does not have a specific category for fire stations, so the category Commercial and Industrial Projects was applied to the Proposed Project to determine appropriate mitigation. Implementation of Mitigation Measure AQ-3 would reduce long-term operational ROG, NOx, and PM_{10} impacts to a less than significant level.

AQ-3 Standard Long-Term Operational Mitigation Measures for Commercial and Industrial Projects

A. Increase building energy efficiency rating by 10% above what is required by Title 24 requirements. This can be accomplished in a number of ways (e.g., increasing attic, wall or floor insulation).

B. Improvement of thermal efficiency of commercial and industrial structures as appropriate by reducing thermal load with automated and timed temperature controls, or occupancy load limits.

C. Incorporate shade trees, adequate in number and proportional to the project size, throughout the project site to reduce building heating and cooling requirements.

D. Use fleet vehicles that run on clean-burning fuels as may be practicable.

Biological Resources

Ornamental trees located throughout the Project site and trees along the western and northern edge of the property provide potential suitable nesting habitat for seven special-status bird species and other nesting raptors and birds. The seven special-status bird species include white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), Swainson's hawk (*Buteo swainsoni*), Nuttall's woodpecker (*Picoides nuttallii*), yellow-billed magpie (*Pica nuttalli*), oak titmouse (*Baeolophus inornatus*), and lark sparrow (*Chondestes grammacus*). While there is only marginally suitable habitat on-site for white-tailed kit, Swainson's hawk, Nuttall's woodpecker, and lark sparrow, there is still potential for these species to occur on-site. All native birds, including raptors, are protected under the Fish and Game Code and the Federal MBTA. To ensure that there are no impacts to protected active nests, Mitigation Measure BIO-1 shall be implemented to reduce potentially adverse effects to all nesting raptors and birds to a less than significant level.

Mitigation Measures

BIO-1 Pre-Construction Nesting Raptor, Bird, and Swainson's Hawk Survey

A. For nesting raptors, conduct a pre-construction nesting raptor survey for all suitable habitat on the Project site and within 0.25 mile of the Project site within 7 days prior to initiation of construction activity during the nesting season (February 1 through August 31).

B. For all other birds protected under the MBTA, conduct a pre-construction nesting bird survey for all suitable habitat on or immediately adjacent to the Project site within 7 days prior to initiation of construction activity during the nesting season (February 1 through August 31).

C. For Swainson's hawk, conduct a pre-construction nesting bird survey for all suitable habitat on the Project site and within 0.5 mile of the Project site within 7 days prior to initiation of construction activity during the nesting season (February 1 through August 31).

D. If active raptor, bird, or Swainson's hawk nests are found, the active nests will be monitored for the first 24 hours prior to any construction-related activity to establish a behavioral baseline. A no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in accordance with CDFW's recommendations for buffer distances relative to the species identified. Once construction activities commence on-site, all nests will be monitored by a qualified biologist to detect any behavioral changes as a result of construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing that change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures that will mitigate significant effects to a less than significant level. Pre-construction surveys are not required for construction activity outside the nesting season.

E. If no active raptor, bird, or Swainson's hawk nests are found, no further measures pertaining to active nests are necessary.

The Project site provides potential suitable habitat for two special-status bat species: Western mastiff bat (*Eumops perotis californicus*) and silver-haired bat (*Lasionycteris noctivagans*). Rarely used buildings and structures located on the Project site may provide suitable roosting habitat for Western mastiff bat. Large trees located along the western and northern edge of the property may provide suitable roosting habitat for the silver-haired bat. Construction activities could adversely affect these bat species if active bat roosts are present on-site. Implementation of Mitigation Measure BIO-2 would reduce potential adverse impacts to active bat roosts to a less than significant level.

BIO-2 Pre-Construction Dusk Emergence Survey

A. A minimum of two qualified biologists shall conduct a dusk emergence survey (to start 1 hour before sunset and last 3 hours), followed by a pre-dawn re-entry survey (to start 1 hour before sunrise and last for 2 hours), in addition to a daytime visual inspection of all potential bat roosting habitat on the Project site included as part of the pre-construction clearance survey. If roosting special-species bats are found on-site or adjacent to the Proposed Project during the pre-construction clearance survey, the following measures shall be implemented, in consultation with CDFW, to reduce adverse impacts to special-status bats:

   1. Avoid direct and indirect impacts to roosting sites by establishing a no-disturbance buffer of 100 feet around roost sites.

   2. Clearing and grubbing near the roost site and lighting near or on the roost site that could potentially interfere with bats entering or leaving the roost shall be prohibited.

   3. Operation of internal combustion equipment such as generators, pumps, and vehicles within 100 feet of the roost site shall be prohibited.

   4. If needed and in coordination with CDFW, exclusions will be installed at directly affected sites after the end of maternity season (late August). Exclusionary materials, including, but not limited to expandable foam and steel wool, shall be applied selectively and as needed until bats have relocated.

   5. Exclusion, if required, will only be performed by a trained bat biologist with current CDFW permits.

Construction work may occur adjacent to the dripline of the large eucalyptus trees along the western boundary of the Project site. Construction work within the designated dripline of a tree could affect the root zone and result in adverse impacts to the tree. Preventing construction from occurring within the dripline of avoided trees would reduce potential impacts to trees that may be protected by the Oroville Tree Ordinance. Implementation of Mitigation Measure BIO-3 would reduce potential adverse impacts to a less than significant level.

BIO-3 Tree Dripline Avoidance

A. Prior to the initiation of construction activities, construction fencing shall be installed along the western boundary of the Project site at the designated dripline of the

eucalyptus trees. The fencing will mark the boundary of the driplines to prevent construction activities from occurring within driplines.

Cultural Resources

No archaeological resources were identified within the Project area as a result of the records search and field survey. Although no archaeological resources were identified, the potential for unrecorded archaeological resources below the ground surface exists. These resources may be disturbed during construction of the Proposed Project. Impacts to unknown resources would be less than significant with the implementation of Mitigation Measure CR-1.

Mitigation Measures

CR-1 Unanticipated Discovery of Cultural Resources

A. If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, will be required if the nature of the unanticipated discovery is prehistoric.

B. Work cannot continue within the no-work radius until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.

C. If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and Project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility and, if eligible, total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the lead agency as verification that the provisions in CEQA for managing unanticipated discoveries have been met.

D. In the event that evidence of human remains is discovered, construction activities within 100 feet of the discovery will be halted or diverted and the requirements of this mitigation measure will be implemented. In addition, the provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. When human remains are discovered, state law requires that the discovery be reported to the County Coroner (Section 7050.5 of the Health and Safety Code) and that reasonable protection measures be taken during construction to protect the discovery from disturbance (AB 2641). If the Coroner determines the remains are Native American, the Coroner notifies the Native American Heritage Commission, which then designates a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted, to make recommendations concerning treatment

of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

The Oroville Tuffs geologic unit present within the Project area has undetermined fossiliferous potential and could potentially be significant for containing nonrenewable paleontological resources; however, the Project would be developed in an area that has already undergone significant subsurface ground disturbance from the construction of the existing Butte FS and UHQ. Therefore, the Project is unlikely to affect significant fossils. Impacts to paleontological resources would be less than significant with the implementation of Mitigation Measure CR-2.

CR-2 Unanticipated Discovery of Paleontological Resources

A. In the event that any fossil materials are encountered during ground-disturbing project-related activities, all activities must be suspended in the vicinity of the find. A paleontologist shall be obtained and empowered to halt or divert ground-disturbing activities. A plan for monitoring and fossil recovery must be completed and implemented before ground-disturbing activities can recommence in the area of the fossil find to allow for the recovery of the find. Recovered fossils shall be analyzed to a point of identification and curated at an established accredited museum repository with permanent retrievable paleontological storage. A technical report of findings shall be prepared with an appended itemized inventory of identified specimens and submitted with the recovered specimens to the curation facility.

Geology and Soils

Native soils on-site are stable and would not result in landslides, liquefaction or collapse; however, the soils do have high-plasticity clays near the surface at the center of the site. Plasticity can potentially shrink and swell, resulting in differential ground movement beneath foundations. Based on the plasticity index test results in the geotechnical report prepared for the Proposed Project, the upper 3 feet of soil underlying the site generally has a potential for shrink-swell behavior. Specific removal, fill and re-compaction recommendations are provided in the geotechnical evaluation. Impacts would be less than significant with implementation of Mitigation Measure GEO-1.

Mitigation Measure

GEO-1 Site-Specific Geotechnical Design Recommendations

A. The site-specific recommendations from Section 4.0 of the *Geotechnical Report, Butte Fire Station/Unit Headquarters – Replace Facility Project* shall be incorporated into site designs and plans by the engineering contractor and followed prior to and during site preparation, grading and construction by the construction contractors.

Hazards and Hazardous Materials

The Proposed Project would include the transport, short-term storage and use, and disposal of hazardous materials related to construction, demolition, and the operation and maintenance of the new facilities A Hazardous Building Materials Survey conducted for the Proposed Project recorded buildings containing, asbestos, lead, and universal waste/household hazardous waste on-site. BMPs stipulating proper storage of hazardous materials and vehicle fueling would be implemented during construction and demolition as part of the Storm water Pollution Prevention Plan (SWPPP) and general construction permit. CAL FIRE and its contractors shall follow all applicable federal, state, and local regulations, including Cal-OSHA, California Fire Code, and National Fire Protection Association (NFPA) requirements, and manufacturer instructions for the management, storage, and handling of hazardous materials and hazardous waste for the construction, demolition, and operation and maintenance of the Proposed Project. Impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance would be less than significant with implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4.

Mitigation Measures

HAZ-1 Removal of Asbestos Containing Materials (ACM)

A. A work plan/job specification shall be developed for the removal of ACMs. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations require the removal of all ACMs prior to demolition, or renovation. The work plan must take into account access to the materials to be abated and safety issues with the roof.

B. A California Division of Occupational Safety and Health (DOSH) registered asbestos abatement contractor shall remove the asbestos in accordance with all Federal, State, and local regulations, and shall utilize state of the art work practices.

HAZ-2 Hazardous Building Materials

A. Prior to demolition of all buildings on-site, all hazardous materials associated with the facilities shall be removed by a qualified contractor and disposed of in accordance with federal, state, and local regulations.

1. Any individual who contracts to provide health and safety services relating to ACMs must be certified by California Division of Occupational Safety and Health (Cal-OSHA) as either a Certified Asbestos Consultant (CAC) or a Site Surveillance Technician (SST) (under the supervision of a CAC). The activities they are certified to provide include: conducting asbestos surveys, writing work plans or specifications for abatement, monitoring the work of abatement contractors, collecting air samples, and determining if the work area is safe for re-occupancy by non-asbestos workers.

2. If more than 100 square feet of materials that contain greater than one tenth percent (0.1%) asbestos will be abated, materials must be abated by a Cal-OSHA registered asbestos abatement contractor.

3. If ACMs that are classified by Cal-OSHA as miscellaneous materials are present, including drywall and taping mud, vinyl floor tile and mastic, roof

mastic, cement siding shingles, and vapor barrier; then removal of these materials is considered a Class II activity according to Cal-OSHA regulations. Work practices and engineering controls for Class II work are specified In Cal-OSHA 8 CCR 1529 (g) (7-8).

4. Friable ACMs greater than one percent (1%) asbestos must be manifested. transported, and disposed of as hazardous waste in accordance with Department of Toxic Substances Control (DTSC). Non-friable RACMS (regulated asbestos containing materials) are those asbestos materials that when removed become friable and must be treated the same as friable ACMs.

5. During activities such as demolition, removal, renovation, clean-up, and routine maintenance, the Cal-OSHA-specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training.

HAZ-3 Stabilization of Lead Based, and Lead Containing Painted Surfaces

A. A work plan/job specification shall be developed for stabilization of lead based, and lead containing painted surfaces prior to the demolition of the buildings.

B. A California Division of Occupational Safety and Health (DOSH) registered lead paint abatement contractor shall stabilize lead painted surfaces in accordance with all applicable Federal, State, and local regulations and utilizing state of the art work practices.

HAZ-4 Avoidance and Minimization Measures for Personnel

A. All personnel working on the Project site shall be informed of the possibility that contaminated soil, soil vapor, and/or groundwater may be encountered on the job site.

B. If previously unknown contaminated soils are encountered in the field during demolition or grading, ground disturbance activities in the vicinity of the discovery shall cease until a qualified hazardous materials management specialist can assess the potentially hazardous substances and, if necessary, develop appropriate management measures that will mitigate significant effects to a less than significant level in coordination with Cal-OSHA and Central Valley Regional Water Quality Control Board (CVRWQCB).

Noise

Based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to these sensitive receptors. To ensure that the Project construction adheres to the requirements of the City of Oroville General Plan and City of Oroville Noise Ordinance, Mitigation Measure N-1 shall be implemented to reduce construction noise to a less than significant level.

Mitigation Measures

N-1 Construction Noise Limits

A. Limit construction to between the hours of 7:00 a.m. and 6:00 p.m. on weekdays;

B. Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

C. Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

D. Utilize "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists and is feasible.

E. The Contractor shall designate a "noise coordinator" who would be responsible for responding to any local complaints about construction noise. The noise coordinator would determine the cause of the noise complaint (e.g. starting too early, bad muffler) and would require that reasonable measures warranted to correct the problem be implemented. The Contractor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the Project site. Additionally, the Project sponsor shall send a notice to neighbors in the Project vicinity with information on the construction schedule and the telephone number for noise complaints.

F. One of the following construction noise limitations shall be met:

1. No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible;

2. The noise level at any point outside of the property plane of the Project shall not exceed 86 dBA;

The proposed generator building would consist of concrete masonry unit (CMU) type construction. However, ventilation openings required for operation of the generators (e.g., cooling air, combustion air, engine exhaust) would be a primary path for noise to escape the building. Therefore, these paths would require acoustic treatment to reduce exterior noise levels from the backup generators. Such treatments would likely include the use of silencers or acoustical louvers, in addition to upgraded engine mufflers. At this time, there is not enough information available on the proposed backup generators to design these noise control measures. Therefore, specific noise control measures would need to be specified at a later time. The specified noise control measures would be designed to achieve a noise level of 70 dBA, or less, at a distance of 25 feet from the proposed generator building. To ensure compliance with a noise level standard of 70 dBA at a distance of 25 feet from the generator building, Mitigation Measure N-2 shall be implemented to reduce impacts to a less than significant level.

N-2 Operational Noise Limits

A. The proposed backup generator building shall be designed to achieve a noise level of 70 dBA, or less, at a distance of 25 feet from the proposed generator building. The design shall be reviewed by a qualified acoustic engineer to verify that sufficient noise control measures have been incorporated into the project design to verify this requirement. It is anticipated that meeting this requirement would likely require the use of silencers or acoustical louvers, in addition to upgraded engine mufflers.

Transportation/Traffic

Currently, full access is available at the western Nelson Avenue driveway. Left turn access to the driveway would become a safety hazard with the eventual installation of a traffic signal at Nelson Avenue / County Center Drive. This driveway would need to be limited to right turns in and out only to prevent safety issues once the signalization is installed. In addition, the center driveway on Nelson Avenue currently does not accommodate eastbound left turns and the striping pattern on Nelson Avenue prohibits left turns into the Project site. The Proposed Project includes eastbound left turns from Nelson Avenue into the Project site. The striping on Nelson Avenue would need to be modified to make those turns legal and to provide an eastbound left turn lane. Furthermore, the proposed center access from Nelson Avenue is slightly offset from 2nd Street across Nelson Avenue. This offset could result in increased risk associated with conflicts between approaching vehicles on Nelson Avenue, 2nd Street and exiting the Project site, which could be a potentially significant impact. Ideally, the planned improvements should be designed to line up the two approaches in order to minimize conflicts between approaching vehicles. Implementation of Mitigation Measure T-1 would reduce impacts associated with access issues on Nelson Avenue to a less than significant level.

Mitigation Measure

T-1 Site Access Planning

A. Limit all access at the western Nelson Avenue driveway to rights turns in and out only.

B. Coordinate with the City of Oroville to modify the striping on Nelson Avenue to provide an eastbound left turn lane to enter the center Nelson Avenue driveway.

C. Prior to finalizing site plans, modify the center Nelson Avenue driveway to line up with 2nd Street across Nelson Avenue.

This Mitigated Negative Declaration meets the requirements of the California Environmental Quality Act. I hereby recommend approval:

Chris Browder
Deputy Chief, Environmental Protection
CAL FIRE

Date

Pursuant to Section 21082.1 of the California Environmental Quality Act, the State of California CAL FIRE has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the Proposed Project and finds that the Initial Study and Mitigated Negative Declaration reflect the independent judgment of CAL FIRE. The lead agency further finds that the project mitigation will be implemented as stated in the Mitigated Negative Declaration.

I hereby approve this Mitigated Negative Declaration:

Duane Shintaku
Deputy Director, Resource Management
CAL FIRE

Date

[To be signed upon approval of the proposed project after the public review period is complete]

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REPRESENTATIVE SITE PHOTOGRAPHS

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACM	asbestos containing materials
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ATCM	Airborne Toxic Control Measures
AT&T	American Telegraph and Telephone Company
BCAG	Butte County Association of Governments
BCAQMD	Butte County Air Quality Management District
BMPs	Best Management Practices
BRA	Biological Resource Assessment
BRCP	Butte Regional Conservation Plan
CAC	Certified Asbestos Consultant
Cal-EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CESA	California Endangered Species Act
Cal-OSHA	California Occupational Health and Safety Administration
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMU	concrete masonry unit
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO_2	CO_2 equivalent
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dBA	decibel A-weighted
DOSH	Division of Occupational Safety and Health
DTSC	Department of Toxic substances Control
ECC	emergency command center
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
FICON	Federal Interagency Committee on Noise
FRRPD	Feather River Recreation and Park District
GHG	greenhouse gas
HCP	Habitat Conservation Plan
KW	kilowatt
L_{50}	median value
LDL	Larson Davis Laboratories
Ldn	day/night average level
Leq	equivalent sound level
Lmax	maximum value
LOS	levels of service

MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
mph	miles per hour
MPOE	minimum point of entry
msl	mean seal level
MT/yr	metric ton per year
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NOA	Naturally Occurring Asbestos
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Services
NRHP	National Register of Historic Places
OPD	Oroville Police Department
OUHSD	Oroville Union High School District
PCB	polychlorinated biphenyls
PG&E	Pacific Gas & Electric
PM_{10}	inhalable particulate matter
$PM_{2.5}$	fine particulate matter
ppd	pounds per day
ppv	peak particle velocity
RCRA	Resource Conservation and Recovery Act
ROG	Reactive Organic Gases
SCOR	Sewage Commission Oroville Region
SR	State Route
SST	Site Surveillance Technician
SWPPP	Storm water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCIP	Transportation Capital Improvement Program
TWSD	Thermalito Water and Sewer District
UCMP	University of California Museum of Paleontology
UPA	Urban Permit Area
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
V	volts
VOC	volatile organic compound

SECTION 1. BACKGROUND

1.1 Summary

Project Title:	Butte Fire Station and Unit Headquarters Replacement Project
Lead Agency Name and Address:	California Department of Forestry and Fire Protection (CAL FIRE) 1416 9th Street, 15th Floor Sacramento, California 95814
Contact Person and Phone Number:	Stephanie Coleman State of California Department of General Services Real Estate Division Services (916) 376-1602
Project Location:	176 Nelson Avenue Oroville, California 95965
General Plan Designation:	Public/Quasi-Public
Zoning:	Public or Quasi-Public (PQ)

1.2 Introduction

The State of California Department of Forestry and Fire Protection (CAL FIRE) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the proposed Butte Fire Station and Unit Headquarters Replacement Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 et seq.) and State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

The Proposed Project is located in the City of Oroville, Butte County, California (Figure 1. *Project Vicinity*). The City of Oroville is located in the southern portion of Butte County, approximately 65 miles north of the City of Sacramento and approximately 22 miles southwest of the City of Chico. The Project site consists of the existing CAL FIRE Butte Fire Station and Unit Headquarters (Butte FS and UHQ), located at 176 Nelson Avenue, Oroville, California 95965. Access to the Project site is provided via Nelson Avenue and Del Oro Avenue.

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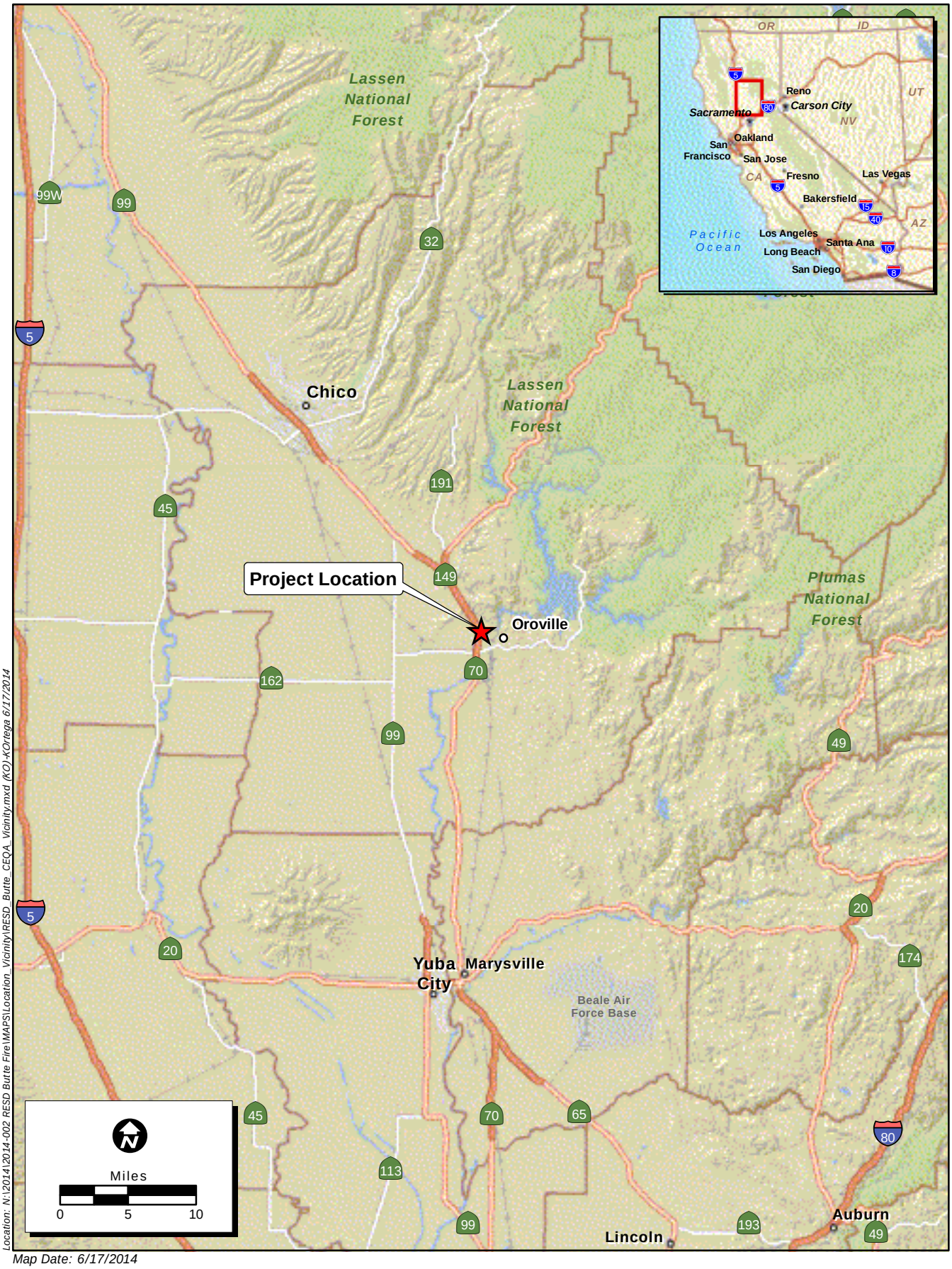

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Map Date: 6/17/2014

Service Layer Credits: Sources: Esri, USGS, NOAA

Figure 1. Project Vicinity

2014-002 RESD Butte Fire

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The Project site corresponds to a 4.36-acre parcel, Assessor's Parcel Number (APN) 031-040-015-000, west of Highway 70 and north of Nelson Avenue between County Center Drive and Del Oro Avenue (Figure 2. *Project Location*). The Project site is bounded by Butte County owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex (Hall of Records) on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. See Representative Site Photographs 1 – Surrounding Land Uses.

The Project site is currently developed and contains the existing Butte FS and UHQ. The Butte FS and UHQ consists of an administrative building, equipment garage (with vehicle bays) and headquarters office, main equipment auto shop (with vehicle bays), equipment/maintenance building (with vehicle bays), two emergency command center (ECC) buildings and ECC tower, barracks, galley (mess hall/kitchen), warehouse/service center, fire suppression building, gas and oil house, fuel tanks, and parking areas (Figure 3. *Existing Facilities)*. See Representative Site Photographs 2 – Existing Facilities.

The existing topography of the site is relatively steep and slopes to the southwest with approximately a 30-foot change in elevation across the site. The Project site is almost entirely paved except for a small unpaved area in the northwestern corner of the site. This area is primarily compacted dirt with a gravel path connecting the site to the Butte County Fire Department-owned land to the north. This area is used for storage by CAL FIRE. Vegetation consists of landscaping, particularly ornamental trees and shrubs planted on the southern boundary and northeastern corner. In addition, several of the buildings are outlined with various ornamental trees and shrubs and a lawn is maintained outside the barracks and galley. A thick stand of eucalyptus (*Eucalyptus* sp.) trees separates the western site boundary from County Center Road. There are four entrance/exit driveways: two from Nelson Avenue (one in the southwestern corner of the site and the second in the center of the southern boundary of the site) and two from Del Oro Avenue (one in the southeastern corner of the site and the second in the northeastern corner of the site) (Figure 3. *Existing Facilities*).

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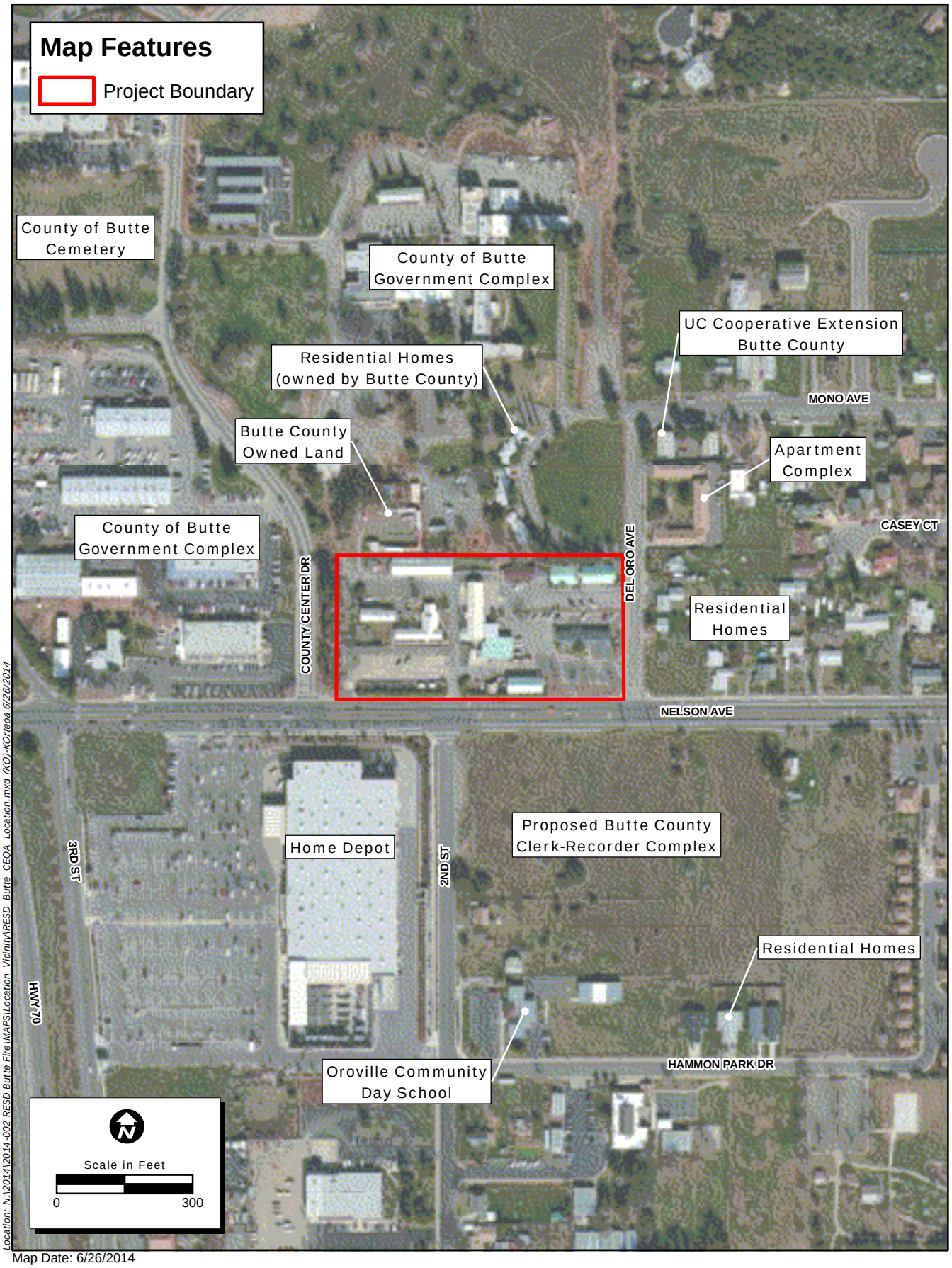

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Map Date: 6/26/2014
Photo Source: ESRI USA Imagery (Accessed 6/26/2014)

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Figure 2. Project Location

2014-002 RESD Butte Fire

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Photo 1. Southwestern corner entrance/exit driveway adjacent to County Center Drive, County of Butte government complex, view west, 1/14/14.

Photo 2. Overview of County of Butte government complex from western site boundary, view west, 1/14/14.

Photo 3. Butte County-owned land/storage area, north of Project site, view northeast, 1/14/14.

Photo 4. Butte County-owned property with residential homes, north of Project site, view west, 1/14/14.

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Representative Site Photographs 1 - Surrounding Land Uses

2014-002 RESD Butte Fire Station

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Photo 5. Overview of residential homes and apartment complex east of the Project site, view northeast, 1/14/14.

Photo 6. Southeastern entrance via Del Oro Avenue, overview of undeveloped land proposed for Butte County Clerk-Recorder complex (aka Hall of Records), view south, 1/14/14.

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Map Date: 6/19/2014
Photo Source: ESRI USA Imagery (Accessed 6/19/2014)

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Figure 3. Existing Facilities

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Photo 7. Existing parking lot with retaining wall, existing fuel tanks, and existing barrack (all to be demolished), view east, 1/14/14.

Photo 8. Existing warehouse and vehicle/apparatus bay (to be demolished), existing ECC building and tower in background (to remain), view east , 1/14/14.

Photo 9. Existing vehicle/apparatus bay (to be demolished), view west, 1/14/14.

Photo 10. Existing administration building and retaining wall (to be demolished), view southeast, 1/14/14.

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Photo 11. Existing vehicle/apparatus bay and retaining wall (to be demolished), view south, 1/14/14.

Photo 12. . Existing vehicle/apparatus bay (to be demolished), existing ECC building and ECC tower (to remain), view east, 1/14/14.

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SECTION 2. PROJECT DESCRIPTION

2.1 Project Background

CAL FIRE is proposing to replace all facilities associated with Butte FS and UHQ, except for the ECC buildings and ECC tower. Replacement of the Butte FS and UHQ would provide necessary fire protection needs to the local area and region for the next 50 years.

The Butte FS and UHQ are co-located at this site. The Butte Unit acts dually as the Butte County Fire Department and serves all unincorporated areas of Butte County, the City of Biggs, and the City of Gridley. In addition, the Butte Unit serves the City of Oroville, the City of Chico, and the town of Paradise through a mutual aid agreement (Butte County 2013).

The Butte FS and UHQ was constructed over a period of several decades, starting in 1937, with primary construction occurring in the early 1960s. The initial complex consisted of only two buildings: the main equipment garage and office building and the equipment maintenance building. Initial construction began in 1937 and continued until 1940. After the initial construction period, additional construction continued in the 1950s and 1960s. In the 1960s, a major shift in the facilities use occurred, as the property was transformed from solely a vehicle repair and storage facility to the Butte County Fire Station and Unit Headquarters. All facilities were built by 1994, with the exception of the ECC buildings, which were built sometime after 1994. In addition, the majority of the buildings within the complex were renovated in the 1980s. Renovations included changes to the fenestration (windows and doors) of the buildings as well as replacement of wood siding with pressed hardboard siding (ECORP 2014b).

Currently, the Butte FS and UHQ operates year-round, with six months out of the year operating at a higher capacity (summer staffing). Three fire engines and one bulldozer provide 24-hour response. The station averages over 1,500 emergency responses per year. There are 15 firefighters on-site during summer staffing (May 1st through November 1st), with a maximum of eight firefighters “hot bunking” (multiple staff sleeping in shifts in the same bed) in the barracks. There are usually four firefighters on-site during the rest of the year. In addition to the firefighters, the auto shop staffs three maintenance employees and there are 23 administrative staff employees working in the administrative building year-round. The following is a list of the number of employees and their titles currently staffed at the Butte FS:

- Chief:1
- Assistant Chief: 3
- Battalion Chief: 5
- Equipment Manager: 1
- Heavy Equipment Mechanic: 2
- Fire Captain Specialist: 2
- Fire Captain Staff: 1
- Fire Captain Operations: 2
- Heavy Fire Equipment Operator: 2
- Fire Fighter 2: 4

- Fire Fighter 1: 12
- Logistics Officer: 1
- Staff Service Analyst: 2
- Office Technician: 3
- Personnel Specialist: 2
- Finance Specialist: 2
- Fire Prevention Specialist: 1
- Defensible Space Inspector: 4

2.2 Project Objectives

The following are the objectives for the Proposed Project:

- Replace the existing Butte FS and UHQ with a new facility to better provide fire protection needs to the local area and region; and
- Continue to improve and maintain high quality firefighting equipment, apparatus, and facilities for CAL FIRE's statewide fire protection system.

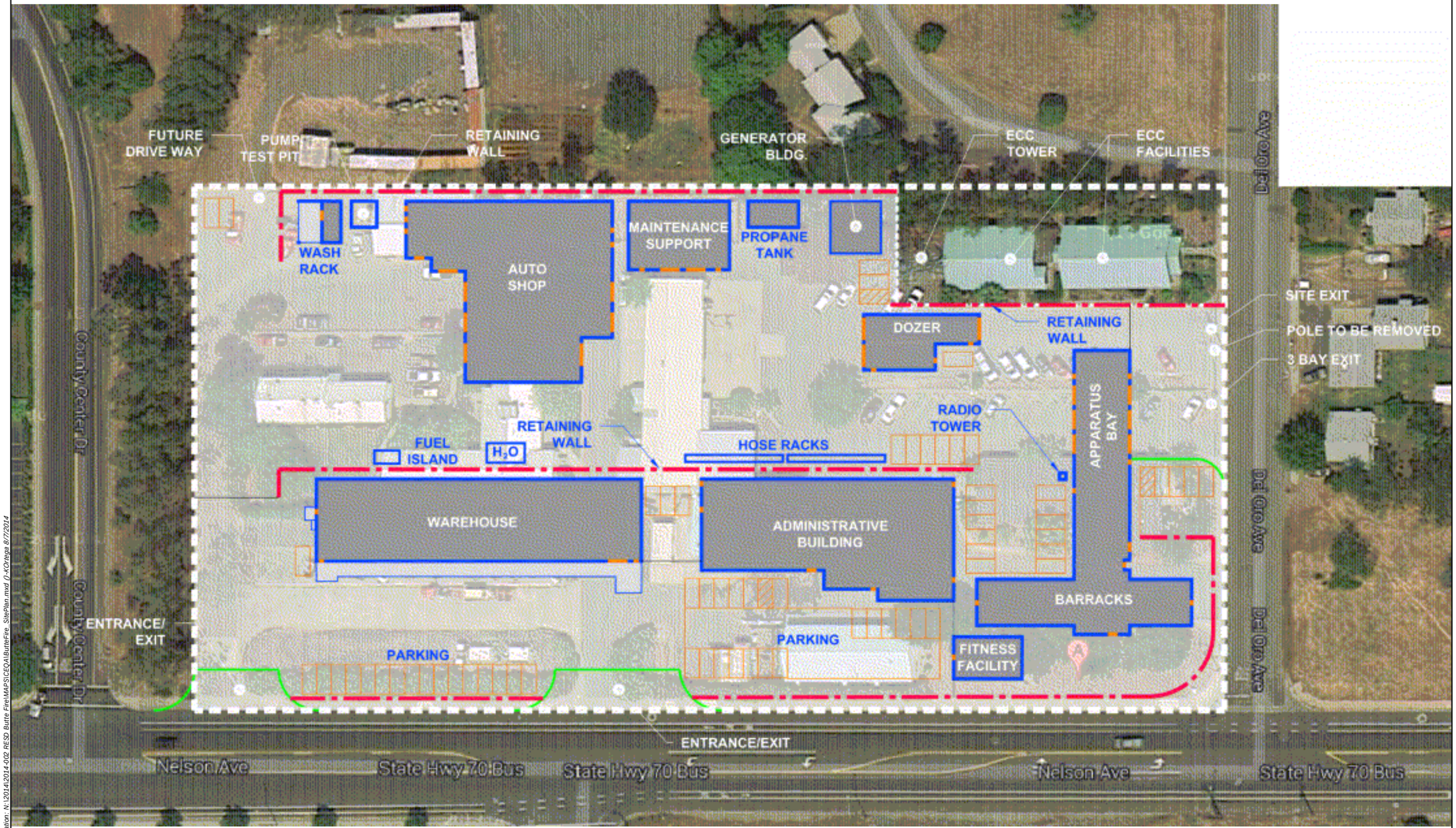
2.3 Project Characteristics

2.3.1 Demolition of Existing Butte Fire Station and Unit Headquarters

Site demolition would include all buildings on-site except for the two ECC buildings and the ECC tower located in the northeast corner of the Project site. In addition to building demolition, the existing hose rack, fuel tanks and propane tanks, all existing utilities and appurtenances including water distribution lines, sewer lines, and gas lines, and existing concrete retaining walls, asphalt concrete paving and concrete sidewalks would be removed. A utility pole located on the eastern boundary would also be relocated. Lastly, clearing, grubbing, and tree removal would occur as required within the limits of the Project site.

2.3.2 New Butte Fire Station and Unit Headquarters

The Proposed Project would construct a new fire station and unit administrative headquarters complex. Construction of new facilities would include: administrative building, three-bay fire apparatus building, 20-bed barracks/mess hall, warehouse/service center, two-bay dozer shed, auto shop, covered vehicle wash rack with filtration system, maintenance support building, physical fitness building, a generator/storage building, a fire pump test pit and several other site improvements (Figure 4. *Site Plan* and Figure 5. *Site Plan – Detail*).



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Base Source: URS

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Figure 4. Site Plan

2014-002 RESD Butte Fire

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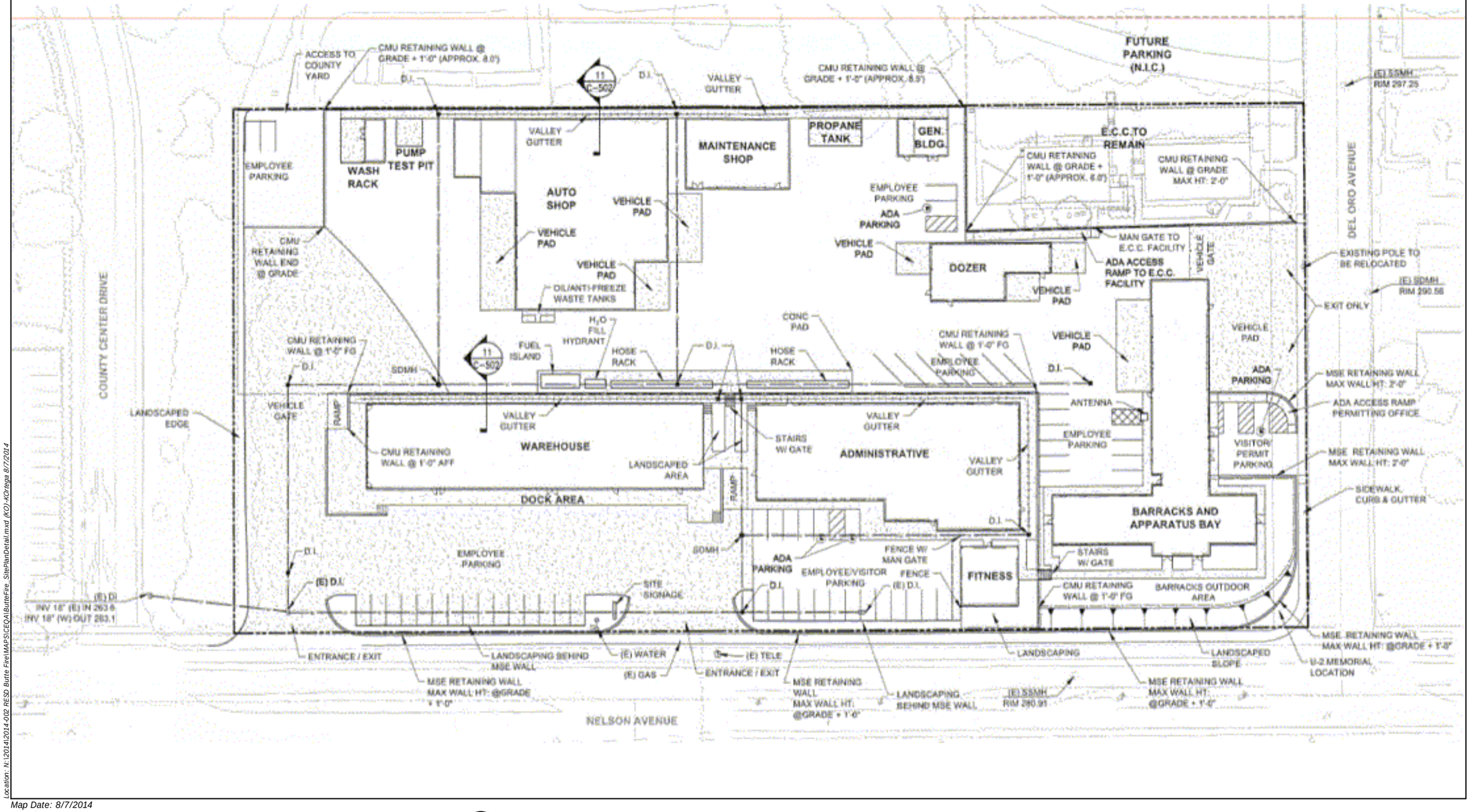

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Map Date: 8/7/2014
Base Source: URS

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Figure 5. Site Plan - Detail

2014-002 RESD Butte Fire

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All buildings would be designed to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design Silver rating requirements; however, only the administrative building would be registered and certified. Detailed descriptions of the proposed facilities and improvements are provided below and floor plans and elevations for each building are provided in Appendix A.

Administrative Building

The administrative building would be approximately 10,130 square feet and would be located near the center of the Project site, just east of the proposed central entrance/exit off Nelson Avenue. The administrative building would be adjacent to the warehouse/service center on the west and the barracks/apparatus bay on the east. Covered parking spaces for the administration building would be located south of the building. Additional parking spaces and hose racks would be located north of the administrative building.

Three-Bay Fire Apparatus Building and 20-Bed Barracks/Mess Hall

The three-bay fire apparatus building and 20-bed barracks/mess hall would be connected to each other and located in the southeastern corner of the Project site. The buildings are connected to ensure the fastest response time. The building would be approximately 8,687 square feet and shaped as a "T." The barracks portion of the building would be parallel to the southern site boundary and the apparatus bay portion of the building would be parallel to the western site boundary (see Figure 4. *Site Plan*). The mess hall would separate the barracks portion from the apparatus portion and contain a fully equipped kitchen. The barracks would have individual bathrooms, a laundry room, and would sleep a maximum of 20 people with eight people "hot bunking" during the peak fire season. The three bays located in the fire apparatus portion of the building would open on both sides of the building (east and west) and would be accessible directly from the proposed entrance/exit off Del Oro Avenue. The building would be equipped with an air compressor, a tailpipe-connected diesel exhaust extractor system, and building mounted exterior flood lighting to allow for work after hours outside the apparatus bays. Floor drains would be provided and routed through a sand/oil interceptor before connecting to the sewer system. Parking for the building would be located between this building and the administrative building, with a few spaces located adjacent to the proposed entrance/exist off Del Oro Avenue. A radio tower would be located adjacent to the apparatus bay, just north of the parking spaces on the west side of the building.

Fitness Building

The fitness building would be approximately 1,160 square feet. The building would be located adjacent to the administrative building covered parking area, south of the barracks along the southern site boundary.

Warehouse/Service Center

The warehouse/service center would be approximately 12,234 square feet and would be located to the west of the administrative building in the southwestern portion of the Project site. The building would be serviceable by a full-length 18-wheeler truck. The building would be climate controlled with evaporate coolers and a separate HVAC would be provided for the offices/separate room within the warehouse. The building would be equipped with pallet rack storage. A fuel island and water tank would be located north of the warehouse/service center.

Auto Shop

The auto shop would be approximately 14,928 square feet and would be located north of the warehouse/service center in the northwestern portion of the Project site. The auto shop would have three pull through bays and one bay for the dozer. The auto shop would be equipped with lifts, storage for batteries and gasoline and a welding room with a hood and have building mounted exterior flood lighting for after-hours work. Specifically the auto shop would be equipped with a 10,000-lb. crane, 12,000-lb. fixed vehicle lift, 40,000-lb. fixed vehicle lift, 60,000-lb. portable vehicle lift, service fluid delivery system, air compressor, tailpipe connected diesel exhaust extraction system, vehicle parts storage rack, and a tire storage rack.

Maintenance Support Building

The maintenance support building would be approximately 2,500 square feet and would be located adjacent to and east of the auto shop. The building would be equipped with ready rack turnout gear storage racks, commercial clothes washer/extractor and commercial gas clothes dryer. The building would also have two one-way vehicle bays.

Generator/Storage Building

The generator/storage building would be approximately 534 square feet and would be located east of the maintenance/support building. A propane tank would separate the two buildings. The building would store two parallel 150 kilowatt (KW) propane emergency power generators (120/208 Volts (V), 3-phase) set up as a 300KW emergency back-up source. In addition, the building would also store hazardous wastes such as gasoline, fuel, and paint thinners.

Covered Vehicle Wash Rack with Filtration System

The covered vehicle wash rack would be approximately 302 square feet and would be located west of the auto shop. The single bay vehicle wash rack would be covered with metal roofing panels, have building mounted exterior flood lights for after-hours work and be equipped with a high pressure water cleaning system and advanced bio remediation wastewater treatment filtration system. The filtration system fully treats the water for a 100 percent recyclable water treatment system. Therefore, the vehicle wash rack would have minimal water demand and no waste water would be released from the system. A proposed future driveway with access to the Butte County-owned land to the north and two parking spaces would be adjacent to the vehicle wash rack on the west.

Two-Bay Dozer Shed

The two-bay dozer shed would be approximately 1,990 square feet and would be located just south of the ECC tower in the northeastern portion of the Project site. The dozer shed would be equipped with air compressor, a tailpipe-connected diesel exhaust extraction system and building mounted exterior flood lighting for after-hours work. Three parking spaces would be located just north, between the dozer shed and the generator/storage building, and one parking space would be located on the south side of the building.

Other Site Improvements

A six-foot high chain link fence with barbed wire would be installed around portions of the perimeter, with sliding auto gates at all entrances/exits. A free-standing fuel island would be located

north of the warehouse/service center and would contain an 8,000-gallon tank, split for 4,000 gallons of diesel and 4,000 gallons of unleaded gasoline, and one 500-gallon, above-ground tank for E-85 ethanol. A 10,000-gallon, three-chambered fire pump test pit would be located in the northwestern portion of the site in between the vehicle wash rack and the auto shop. A 60-foot-long hose rack would be installed north of the administrative building and a new foundation for a radio tower would be located adjacent to the apparatus bay on the west. Other site improvements would include new landscaping and irrigation, pole-mounted site lighting, and signage.

Utilities

New domestic and fire water distribution systems would be installed from the existing public systems in Nelson Avenue. Domestic and fire water connections are required for each building, and fire hydrants would be spaced throughout the Project site. Water service would be provided by Thermalito Water and Sewer District (TWSD). New wastewater collection systems would be installed from the existing public systems in Nelson Avenue. Sewer service would be required for each building and would be provided by the City of Oroville. A new storm water collection system would be installed. The system would include an underground storm drain, drain inlets, drains connecting to building and downspouts, and a connection to the existing drainage system provided by the City of Oroville.

New underground electrical and telephone distribution systems would be installed in Nelson Avenue. The electrical systems would be extended from the new main switchboard at the generator/storage building to each building. Electricity service would be provided by Pacific Gas and Electric (PG&E). Telephone systems would originate at the new minimum point of entry (MPOE) at the administrative building and would connect to each building. Telephone service would be provided by American Telegraph and Telephone Company (AT&T). In addition, new underground raceways for electrical, lighting controls, security, fire alarm, and telephone/data systems would be installed. A new propane tank for the emergency generator and a new natural gas distribution system from the public utility located in Nelson Avenue would also be installed. Natural gas service would be provided by PG&E.

Grading and Paving

The site would first have a rough grade to level areas for the buildings, paving, and flatwork. New concrete paving for access drives and parking areas would be installed. New curbs, gutters, and sidewalks would be installed throughout the site and along Nelson Avenue and Del Oro Avenue. Five new retaining walls would be installed throughout the site. The first would be along the southern boundary of the site between the two entrances/exits off Nelson Avenue, the second would also be along the southern boundary from the central entrance/exit to the barracks, the third along the north side of the warehouse/service center and the administrative building, the fourth along the south side of the ECC Tower and ECC Buildings, and the fifth along the northern boundary from the vehicle wash rack to the generator/storage building. In addition, several temporary and permanent erosion control and sediment control measures would be installed throughout the site.

2.4 Operations and Maintenance

2.4.1 Construction Period Operations and Maintenance

CAL FIRE would operate from the existing Butte County Fire Department Facilities located throughout Butte County during demolition and construction of the replacement Butte FS. If necessary, CAL FIRE would rent office space, auto shop space, and warehouse space to accommodate operational and storage needs.

The ECC would remain in full operation during construction. Permanent power would be established and delivered to the ECC prior to disconnecting the existing site power for demolition. County-owned land to the north would be used for temporary parking during construction through an agreement with the County; however, this area would not be developed for permanent parking at this time.

2.4.2 New Facility Operations and Maintenance

Operations of the new Butte FS would be similar to the existing operations and employee positions would be the same as those described in Section 2.1 Project Background. The maximum capacity of the barracks would increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary. There would be no change in the number of permanent firefighters on-site and there would be no change in the number of auto shop employees. Approximately three to five additional administrative employees would be employed on the site. No changes are proposed for the equipment and trucks stored at the Butte FS and UHQ. Descriptions of operations for the fire station, auto shop, warehouse and administrative building are provided below.

Fire Station

The number of firefighters staffed would vary throughout the year depending on demand. A maximum of 20 people would sleep on-site during prime fire seasons (six months, summer).The fire station would operate 24 hours a day, seven (7) days a week (24/7), year round. On average, the fire station would generate eight (8) vehicle trips per day during the winter, 20 vehicle trips per day during the summer and 30 or more vehicle trips per day during a peak emergency event. On average, there are approximately 10 peak events per year. Peak events last a minimum of one week, and vary depending on the size of the event. On average, peak events last two to three weeks with some lasting up to six weeks. A peak event would include several additional fire control apparatus staging at the fire station and/or utilizing the station facilities (auto shop, warehouse). Additional equipment could include up to 10 fire engines, two (2) dozers, six (6) fire crew buses, and other miscellaneous vehicles.

Auto Shop

The auto shop would staff three employees and would operate from 7:00 AM to 6:00 PM, seven days a week, year round. On average, the auto shop would generate five (5) vehicle trips per day during the winter, 10 vehicle trips per day during the summer, and 15 or more during a peak emergency event. The auto shop would service on average five (5) to six (6) vehicles per day during the winter and summer and, depending on the size of the emergency event, five (5) to 50 or more vehicles per day during a peak emergency event.

Warehouse

On average, 12 package delivery (e.g., UPS or FedEx) trucks and three (3) 18-wheeler trucks would make deliveries every week to the warehouse.

Administrative Building

The administrative building would operate from 7:00 AM to 6:00 PM, five days a week, year round. Currently the administrative building staffs 23 employees. The new administrative building would staff an additional three to five employees, resulting in a total of 26-28 employees. Daily operations would include providing basic information to the public regarding fire prevention and education, fire

activity, employment, training opportunities, forest practice laws and enforcement, building and fire inspections, and conducting station tours.

2.5 Project Timing

The Proposed Project would be constructed as a single phase project with CAL FIRE vacating the entire site except for the ECC, which will remain in service during construction. The duration from start of construction to substantial completion is expected to be 18 months. Table 1 below describes the construction stages and duration.

Table 1. Construction Stages

Description of Activity	Duration (approximate)
Stage 1 – Hazardous Materials Abatement	
Removal of lead based paint and asbestos containing materials: mastic, tile, and light ballasts	Two weeks
Stage 2 – Demolition	
Demolition of structures; removal of asphalt, concrete, and retaining walls	Three weeks
Stage 3 – Grading	
Removal of materials and compaction of site to a rough grade (four weeks); finish grading in conjunction with installation of retaining walls and site underground work (four weeks)	Eight weeks
Stage 4 – Final Construction	
On-going backfilling and compaction at the retaining walls and return of disrupt earth work on-site; construction of buildings and other on-site improvements	14 months and 3 weeks
	Total: 18 months

2.6 Regulatory Requirements, Permits, and Approvals

Table 2 below describes the approvals and regulatory permits that would be required for implementation of the Proposed Project:

Table 2. Regulatory Requirements, Permits, and Approvals

Agency or Organization	Approval or Permit
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) permit, Construction Storm Water General Permit (including the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and best management practices
Butte County Certified Unified Program Agency (CUPA)	Permits associated with storage and use of diesel and gasoline, oils and lubricants, and specialty fire suppression liquids, tanks, and oil/water separators. Because more than 10,000 gallons of petroleum products are stored on-site, a Spill Prevention, Control and Countermeasure Plan must be filed and be stamped by a registered civil engineer.
Butte County Air Quality Management District (BCAQMD)	Air permit (for the generator) and Authority to Construct Permit
State Fire Marshal; State Architect	Approval for ADA, structural review and fire suppression and code compliance review

* The Proposed Project would be located on State-owned property and would remain a State-owned and operated facility. As such, the property would not be within permitting jurisdiction of the City of Oroville and permits for planning and building activities are not required.

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SECTION 3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

Determination

On the basis of this initial evaluation:

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

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

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

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

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

Duane Shintaku
Deputy Director, Resource Management
CAL FIRE

12/9/14
Date

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SECTION 4. ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Regional Setting

The Proposed Project is located in the City of Oroville in the central portion of Butte County, California. The prominent geomorphic features throughout the county include mountains, hills, and rivers. Butte County is represented by five categories of natural features: valley, foothills, mountains, water bodies, and unique land forms. The City of Oroville and the Project site are located in the foothills, which is a transition between the valley floor and the mountains. The rolling topography consists of extensive foothills with elevations ranging between 200 feet to 2,000 feet above mean seal level (msl). Among the hills, there are stands of oak woodland, distinct land forms such as Table Mountain, grasslands for grazing, and rural, suburban and urban development (Butte County 2010).

State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view (Caltrans 2013).

There are no officially designated State scenic highways in Butte County. The portion of Highway 70 north of the intersection with Highway 149, located approximately 5 miles northwest of the Project site, has been identified as eligible for listing by the California Scenic Highway Program (Butte County 2010; Caltrans 2013). In addition, Butte County has designated two County scenic highways. These include the portion of Highway 70 through Feather River Canyon and Highway 32 north of Forest Ranch (Butte County 2010). Neither of these County-designated scenic highways is in proximity to the Proposed Project.

Visual Setting

The Proposed Project is located at the existing Butte FS and UHQ in the northwestern portion of the City of Oroville, approximately one mile northwest of the City of Oroville's city center, and approximately 22 southwest of the City of Chico. The Project site is bound by Butte County owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex (aka Hall of Records) on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. The landscape of the City of Oroville is characterized by suburban and urban development with the Feather River bisecting the City from east to west. The City of Oroville is split into three districts: Historic Downtown Business District, South Oroville Industrial District, and Oroville Municipal Airport District. There are also five preserves located within the city limits, these include: Oroville Dam Area, Feather River Waterfront, Oroville Wildlife Refuge, North and South Thermalito Forebay, and Thermalito Afterbay (City of Oroville 2008).

Visual Character of the Project Site

The Project site corresponds to a 4.36-acre parcel west of Highway 70 off Nelson Avenue between County Center Drive and Del Oro Avenue. The Project site is currently developed and contains the existing Butte FS and UHQ. The Butte FS and UHQ consists of an administrative building, equipment garage (with vehicle bays) and headquarters office, main equipment auto shop (with vehicle bays), equipment/maintenance building (with vehicle bays), two ECC buildings and ECC tower, barracks, galley (mess hall/kitchen), warehouse/service center, fire suppression building, gas and oil house, fuel tanks, and parking areas (see Representative Site Photographs 2 – Existing Facilities). The existing topography of the site is relatively steep and slopes to the southwest, changing elevation by approximately 30 feet across the site. The Project site is almost entirely paved except for a small unpaved area in the northwestern corner of the site. In addition, several of the buildings are outlined with various ornamental trees and shrubs and a lawn is maintained outside the barracks and galley. See Section 1.3 Surrounding Land Uses/Environmental Setting for a more detailed description of the visual character of the Project site.

4.1.2 Aesthetics (I.) Environmental Checklist and Discussion

a)	Would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Land uses surrounding the Project site include Butte County-owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex (aka Hall of Records) on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue (see Figure 2. *Project Location* and Representative Site Photographs – Surround Land Uses). Scenic vistas in the Project vicinity include views of Feather River located approximately 0.75 mile south of the Project site and Table Mountain located approximately two miles northeast of the Project site. The Project site is an existing developed public facility within an urban developed area and cannot be viewed from surrounding scenic vistas. The Proposed Project would not change the existing use of the site and would not substantially alter the existing visual appearance. Thus, development of the Proposed Project would not adversely affect scenic vistas. No impact would occur.

b)	Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As stated in Section 4.1.1 Environmental Setting, there are no designated State scenic highways in Butte County and Highway 70 north of the intersection with Highway 149 has been identified as eligible for listing (Butte County 2010; Caltrans 2013). In addition, the portion of Highway 70 through Feather River Canyon and Highway 32 north of Forest Ranch are designated County scenic highways by Butte County (Butte County 2010). The Project site is not located within view of any of the portions of highways discussed above. Therefore, the Proposed Project would not substantially

damage scenic resources within a State scenic highway or County scenic highway. No impact would occur.

c)	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The Project site is located at the existing Butte FS and UHQ. The Project site is currently fully developed (see Representative Site Photographs 2 – Existing Facilities). The Proposed Project would replace the existing Butte FS and UHQ with new, updated facilities and enhance the physical appearance of the site. Landscaping would be installed along the southern and western boundaries to shield views of the Project site from Nelson Avenue and from County Center Drive. The Project site would continue to function as the Butte FS and UHQ and the visual character of the site would be improved. A less than significant impact would occur.

d)	Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

The Proposed Project consists of a fire station, vehicle repair and maintenance facility, and unit headquarters for the CAL FIRE Butte Unit. As described in Section 2.4 Operations and Maintenance, the fire station would operate 24 hours a day, seven days a week; the auto shop would operate from 7:00 AM to 6:00 PM, seven days a week and the administrative building would operate 7:00 AM to 6:00 PM, five days a week. All buildings would have exterior nighttime lighting. The auto shop, vehicle wash rack, and dozer shed would also be equipped with exterior flood lighting if after hours work is necessary. The auto shop and vehicle wash rack are both located in the northwestern portion of the site and views of the buildings from Nelson Avenue would be shielded by the warehouse and views of the buildings from County Center Drive would be partially shielded by the eucalyptus trees. The dozer shed is located in the northeastern portion of the site and views from residential homes located along Del Oro Avenue would be partially shielded by the ECC buildings and the apparatus bay building. Views of the dozer shed from Nelson Avenue would be blocked by the administrative building, fitness center, and barracks (see Figure 4. *Site Plan*).

Currently, the existing Butte FS and UHQ operates 24 hours per day, seven days a week and has exterior lighting. The Proposed Project may alter the lighting pattern due to changes to building configuration and landscaping on-site, which could result in impacts to residential homes along Del Oro Avenue and north of the Project site. In addition, the flood lighting from the dozer shed discussed above may adversely impact residential homes located along Del Oro Avenue. In order to minimize light spillage onto the adjacent residential properties along Del Oro Avenue and north of the Project site, a lighting plan shall be developed describing specific measures regarding light shielding. Implementation of Mitigation Measure AES-1 would reduce potential adverse impacts to a less than significant level.

Mitigation Measure

AES-1 Lighting Plan

A. Prior to construction, a lighting plan for the Project site specifying the location and type of exterior light sources shall be prepared and submitted to CAL FIRE and DGS for approval. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the eastern boundary and the northern boundary of the Butte FS and UHQ property.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

The Project site is designated Public/Quasi-Public by the *City of Oroville 2030 General Plan* (Oroville General Plan) and is zoned Public or Quasi-Public (PQ) by the City of Oroville Zoning Code (City of Oroville 2009; City of Oroville 2014). The Project site is located at the existing Butte FS and UHQ on 4.36 acres owned by CAL FIRE. All components of the Proposed Project would be built within the property, which is bound by Butte County-owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. (See Section 1.3 Surrounding Land Uses/Environmental Setting for a detailed discussion and Representative Site Photographs).

The Project site is in an urban area surrounded primarily by residential, commercial and office, public or quasi-public, and vacant land uses (City of Oroville 2009). As previously described in Section 2.1 Project Background, CAL FIRE acquired the land for the Butte FS and UHQ and began construction of the facility over a period of decades, starting in 1937, with primary construction occurring in the early 1960s. It has been maintained as a public facility. The Project site has not been used for agriculture or developed for forestry resources for more than 70 years.

4.2.2 Agriculture and Forestry Resources (II.) Environmental Checklist and Discussion

a)	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As previously described in Section 4.2.1 Environmental Setting, the Project site is designated Public/Quasi-Public and is zoned as PQ. The property has been used as the Butte FS for more than 70 years and the Proposed Project would be consistent with the City of Oroville's General Plan designation and zoning code. No impact would occur.

b)	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project is not located within an agricultural use zone. As previously described in Section 4.2.1 Environmental Setting, the Project site is designated as Public/Quasi-Public and is zoned as PQ (City of Oroville 2009; City of Oroville 2014). The Proposed Project is not under a Williamson Act contract (City of Oroville 2009). Therefore, the Project would not result in a conflict with an agricultural zoning designation or a Williamson Act contract. No impact would occur.

c)	Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project Site is a developed public facility and is not zoned for forest land, timberland, or timberland production (City of Oroville 2009). As previously described in 4.2.1 Environmental Setting, the Project site is surrounded primarily by residential, commercial and office, public or quasi-public, and vacant land uses (City of Oroville 2009). No impact would occur.

d)	Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project is located at the existing Butte FS and UHQ and would not convert forest land to non-forest use. No impact would occur.

e)	Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project consists of demolition and replacement of the existing Butte FS and UHQ. The Proposed Project would be consistent with the property's PQ zoning designation (City of Oroville 2009). There are no agricultural or forest resources on-site. As previously described in Section 4.2.1 Environmental Setting, the property has been used as a public facility by CAL FIRE since 1937.

Therefore, the Proposed Project would not result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

4.3 Air Quality

4.3.1 Environmental Setting

An Air Quality Study was conducted by KD Anderson & Associates to evaluate construction-related and operational impacts of the Proposed Project on air quality (KD Anderson 2014a; Appendix B). The findings of the Air Quality Study are summarized below.

Attainment Status and Regional Air Quality Plans

There are three basic designation categories: nonattainment, attainment, and unclassified. A nonattainment designation indicates that the air quality violates an ambient air quality standard. Although a number of areas may be designated as nonattainment for a particular pollutant, the severity of the problem can vary greatly. To identify the severity of the problem and the extent of planning required, nonattainment areas are assigned a classification that is commensurate with the severity of their air quality problem (e.g., moderate, serious, severe). In contrast to nonattainment, an attainment designation indicates that the air quality does not violate the established standard. Finally, an unclassified designation indicates that there are insufficient data for determining attainment or nonattainment. EPA combines unclassified and attainment into one designation for ozone, carbon monoxide (CO), inhalable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$) (KD Anderson 2014a).

The Proposed Project is located within the Sacramento Valley Air Basin. The current air quality attainment designations for Butte County are summarized in Table 3 below.

Table 3. Air Quality Attainment Status Designations for Butte County

Pollutant	State Standards	National Standards
Ozone (1 Hour Standard)	Nonattainment	No Standard
Ozone (8-Hour Standard)	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Inhalable Particulate Matter (PM_{10})	Nonattainment	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Attainment

Source: KD Anderson 2014a

Significance Thresholds

Significance thresholds used to determine the significance of impacts associated with ozone precursors and PM_{10} emissions are from the BCAQMD document CEQA Air Quality Handbook (CEQA Handbook). As described in the handbook, the BCAQMD recommends use of a three-level tiered approach based on the overall amount of emissions generated by the project. The handbook describes the three levels as Level A, Level B, and Level C. Table 4 shows the threshold amounts for the each of the three levels, for ROG, NOx, and PM_{10} emissions. Using the approach presented in the CEQA Handbook, all projects are initially considered to be either potentially significant or significant. No projects are considered initially less than significant. Mitigation measures are specified for all levels of projects. Emissions meeting Level A thresholds will require basic mitigation measures, emissions in the Level B range will require more extensive mitigation measures, and

emissions that exceed Level C thresholds will require the most extensive mitigation measures (KD Anderson 2014a). A detailed description of determining the mitigation measures required to reduce impacts to a less than significant level is provided in the Air Quality Study in Appendix B.

Table 4. Air Quality Significance Thresholds for Criteria Pollutants (pounds per day)

Project Size Level	Nitrogen Oxides (NOx)	Reactive Organic Gas (ROG)	Inhalable Particulate Matter (PM_{10})
Level A	≤25	≤25	≤80
Level B	>25 and ≤137	>25 and ≤137	>80 and ≤137
Level C	>137	>137	>137

Source: KD Anderson 2014a

Asbestos

Naturally Occurring Asbestos (NOA) has been identified as a toxic air contaminant (TAC) by the ARB. No quantitative significance thresholds have been set for asbestos. However, the California Department of Conservation provides a map that may be used as a screening-level indicator of the likelihood of NOA being present in the geology of the project site (KD Anderson 2014a).

The asbestos screening map:

> *"Shows the areas more likely to contain natural occurrences of asbestos in California. Its purpose is to inform government agencies, private industry and the public of the areas in the State where natural occurrences of asbestos may be an issue. In these areas, consideration of the implications of the presence or absence of asbestos through examination of more detailed maps and site-specific investigations could be warranted as part of public or private decision making."*

If a project site is located outside of all the areas considered to be more likely to contain NOA, it may be considered to have a relatively lower probability of containing NOA and will be considered to have a less than significant impact. If a project site is located within an area considered more likely to contain NOA, it may be considered to have an elevated probability of containing NOA and will be considered to have a significant impact. On-site soil sampling, and the implementation of mitigation measures may be required to reduce the impact to a less than significant level (KD Anderson 2014a).

Asbestos is a naturally occurring mineral that has been added to various types of building construction materials to increase fire resistance, strength, and durability. While the use of asbestos as a building material has declined recently, the addition of asbestos to building materials has never been completely banned. Because use of asbestos as a building material has declined recently, older structures are sometimes presumed to contain asbestos. Uncontrolled demolition activities that may expose people to airborne asbestos is considered a significant impact (KD Anderson 2014a).

Local Carbon Monoxide

Carbon monoxide (CO) concentrations are strongly associated with vehicle traffic. Elevated concentrations of CO occur in close proximity to roadways with high traffic volumes and high levels of traffic congestion. In traffic impact studies, traffic congestion is most commonly expressed using levels of service (LOS). The letters A through F are used to describe LOS, with LOS A being conditions without congestion, and LOS F being conditions with substantial congestion. As noted in the CEQA Handbook,

"If either of the following criteria is true of any intersection affected by the project traffic, then the project can be said to have the potential to create a violation of the CO standard:

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F, with A being best and F being worst); or

- A traffic study indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project generated traffic is included (KD Anderson 2014a)."

4.3.2 Air Quality (III.) Environmental Checklist and Discussion

a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Butte County AGMD currently has an air quality plan entitled: *Northern Sacramento Valley Planning Area 2012 Triennial Air Quality Attainment Plan* (Air Quality Plan). The Air Quality Plan was created by the air districts within the Northern Sacramento Valley. The purpose of the Air Quality Plan is to achieve and maintain healthy air quality throughout the northern air basin. The Air Quality Plan addresses the progress made in implementing the original plan submitted to the California Air Resources Board in 1991 and has been updated every three years, most recently in 2012. The Air Quality Plan includes the proposed control strategies necessary to attain the California ozone standard at the earliest practicable date (SVAB 2013).

The Proposed Project is replacing an existing facility (Butte FS and UHQ). Because the Proposed Project is a replacement project of a facility currently existing when the Air Quality Plan was created and adopted, it is assumed the existing facility is consistent with the Air Quality Plan. Thus, the Proposed Project would not conflict with the current Air Quality Plan. No impact would occur.

b)	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

Construction-Related Impacts

Implementation of the Proposed Project would result in construction activity, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of PM_{10} and $PM_{2.5}$. The operation of construction equipment results in exhaust emissions, which include ROG and NOx (KD Anderson 2014a). Table 5 describes estimates of construction related ROG, NOx, and PM_{10} emissions.

Table 5. Construction-Related Criteria Pollutant Emissions without Mitigation Measures

		Reactive Organic Gases	Nitrogen Oxides	Inhalable Particulate Matter
Demolition	Summer	2.36	22.65	2.73
	Winter	2.37	22.78	2.73
	Highest	2.37	22.78	2.73
Site Preparation	Summer	0.39	3.96	0.41
	Winter	0.39	3.97	0.41
	Highest	0.39	3.97	0.41
Grading	Summer	0.80	7.76	2.18
	Winter	0.79	7.77	2.18
	Highest	0.80	7.77	2.18
Building Construction	Summer	3.36	21.58	1.92
	Winter	3.37	21.82	1.92
	Highest	3.37	21.82	1.92
Paving	Summer	2.12	16.55	1.17
	Winter	2.11	16.57	1.17
	Highest	2.12	16.57	1.17
Architectural Coating	Summer	36.86	0.78	0.14
	Winter	36.86	0.79	0.14
	Highest	36.86	0.79	0.14
Level A Significance Threshold	N/A	25	25	80

Notes: All Values are in pounds per day. Bold, underlined font indicates value exceeds Level A Significance Threshold.
Source: KD Anderson 2014a

As shown in Table 5, during construction of the Proposed Project:

- The maximum daily amount of ROG emissions during all phases of construction would be 36.86 pounds per day (ppd). As shown in Table 4, this would be in the Level B range.
- The maximum daily amount of NOx emissions during all phases of construction would be 22.78 ppd. As shown in Table 4, this would be in the Level A range.
- The maximum daily amount of PM10 emissions during all phases of construction would be 2.73 ppd. As shown in Table 4, this would be in the Level A range.

As described in Section 4.3.1 Environmental Setting, all projects are considered either potentially significant or significant. Thus, the Proposed Project is considered to have a potentially significant construction-related impact on criteria pollutant emissions (KD Anderson 2014a).

As shown in Table 5, the maximum amount of ROG emissions would occur during the Architectural Coating phase of construction. The ROG emissions during this phase are largely due to evaporation of ROG from the architectural coating (i.e., paint). To reduce the amount of ROG emissions during the Architectural Coating phase to the Level A range, the Mitigation Measure AQ-1 shall be implemented. With the implementation of Mitigation Measure AQ-1 the maximum daily amount of ROG emissions would be 18.51 ppd, which would be in the Level A range (see Table 4) (KD Anderson 2014a).

To further reduce construction-related ROG, NOx, and PM_{10} emissions to a less than significant level mitigation must be implemented. Implementation of Mitigation Measure AQ-2 would reduce construction-related ROG, NOx, and PM_{10} emissions to a less than significant level.

Mitigation Measures

AQ-1 Apply Low Volatile Organic Compound Architectural Coatings

A. During construction, use architectural coatings with a low volatile organic compound (VOC) content. The project-wide average VOC content of architectural coatings should be 50 grams per liter (g/l) or less.

AQ-2 Standard Construction-Related Mitigation Measures

A. Maintain all construction equipment in proper tune according to manufacturer's specifications

B. Maximize to the extent feasible, the use of diesel construction equipment meeting the California Air Resources Board's (CARB) 1996 or newer certification standard for off-road heavy-duty diesel engines.

C. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimized dust emissions.

D. Haul vehicles transporting soil into or out of the property shall be covered.

E. A water truck shall be on site at all times. Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary.

F. On-site vehicles limited to a speed that minimizes dust emissions on unpaved roads.

G. Haul roads shall be sprayed down at the end of the work shift to form a thin crust. This application of water shall be in addition to the minimum rate of application

H. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the District shall also be visible to ensure compliance with District Rule 200 & 205 (Nuisance and Fugitive Dust Emissions).

I. All visibly dry disturbed soil surface areas of operation shall be watered to minimize dust emission.

J. Existing roads and streets adjacent to the project will be cleaned at least once per day unless conditions warrant a greater frequency.

K. All visibly dry disturbed unpaved roads surface areas of operation shall be watered to minimize dust emissions. Unpaved roads may be graveled to reduce dust emissions.

M. Construction workers shall park in designated parking areas(s) to help reduce dust emissions.

N. Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material may be required to further reduce dust emissions.

Naturally Occurring Asbestos (NOA)

Portions of Butte County contain a type of rock referred to as "ultramafic." As a result, these areas are considered to be more likely to contain NOA. Emissions of NOA have been attributed to soil-disturbing activities, including construction activities. Project-related construction activities would entrain NOA into the air, exposing on-site sensitive uses and other land uses in areas surrounding the project site to NOA (KD Anderson 2014a).

A screening evaluation of potential impacts associated with NOA was conducted based on a review of the California Department of Conservation map *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*. Based on information presented in the *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*¸ the areas more likely to contain NOA which are nearest to the Project site are approximately two miles north of Lake Oroville and approximately 5 miles east of Lake Oroville (KD Anderson 2014a).

Because no portion of the Project site is in an area considered more likely to contain NOA, the impact of the project on NOA is considered less than significant.

Demolition-Related Asbestos

Construction of the Proposed Project includes removal of asbestos-containing material. The potential for asbestos to be present in the building material in existing structures on the Project site would be consistent with the age of the structures. Demolition of these structures, if uncontrolled, may have the potential to release and entrain asbestos fibers. The release and entrainment of asbestos fibers would be considered a significant impact (KD Anderson 2014a).

Under existing regulations, demolition of structures containing asbestos is governed at the local, state, and federal levels. At the local level, Butte County AQMD Rule 1000 incorporates California State Airborne Toxic Control Measures (ATCM). Rule 1000 specifically incorporates the *Asbestos ATCM for Construction, Grading, Quarrying and Surfacing Mining Operations* (17 CCR 93105). At the federal level, the National Emission Standards for Hazardous Air Pollutants (NESHAP) includes 40 CFR Part 61 Subpart M, National Emissions Standard for Asbestos, which describes requirements for controlling asbestos during demolition activities (KD Anderson 2014a).

Compliance with Butte County AQMD Rule 1000, the Asbestos ATCM for Construction, Grading, Quarrying and Surfacing Mining Operations, and 40 CFR Part 61 Subpart M during demolition activities would control the potential release of asbestos fibers and would be considered to reduce the impacts associated with asbestos (KD Anderson 2014a). In addition, implementation of Mitigation Measures HAZ-1 and HAZ-2 would further reduce impacts to a less than significant level. See Section 4.8 Hazards and Hazardous Materials for a more information regarding asbestos.

Long-Term Operational Impacts

The Proposed Project would involve the replacement of the existing Butte FS and UHQ. The large majority of activities that would generate long-term operational emissions are already occurring at the Project site, and would not be affected by the proposed replacement Project. With implementation of the Proposed Project, these activities would continue as they currently occur. As described in the Traffic Assessment prepared for the Proposed Project (see Appendix G and Section 4.16 Traffic and Transportation), the Proposed Project would result in a net change in daily vehicle trips. The Project would result in a net increase of 10 vehicle trips per day (KD Anderson 2014a).

The project-related net change in vehicle travel would result in the following:

- The net change in ROG emissions would be 2.32 ppd. As shown in Table 4, this would be in the Level A range.
- The net change in NOx emissions would be 4.16 ppd. As shown in Table 4, this would be in the Level A range.
- The net change in PM_{10} emissions would be 1.50 ppd. As shown in Table 4, this would be in the Level A range.

As described in Section 4.3.1 Environmental Setting, according to the CEQA Handbook, all projects are initially considered either potentially significant or significant. Therefore, the Proposed Project is considered to have a potentially significant long-term operational impact on criteria pollutant emissions (KD Anderson 2014a). The CEQA Handbook does not have a specific category for fire stations, so the category Commercial and Industrial Projects was applied to the Proposed Project to determine appropriate mitigation. Implementation of Mitigation Measure AQ-3 would reduce construction-related ROG, NOx, and PM_{10} impacts to a less than significant level.

Mitigation Measure

AQ-3 Standard Long-Term Operational Mitigation Measures for Commercial and Industrial Projects

A. Increase building energy efficiency rating by 10% above what is required by Title 24 requirements. This can be accomplished in a number of ways (e.g., increasing attic, wall or floor insulation).

B. Improvement of thermal efficiency of commercial and industrial structures as appropriate by reducing thermal load with automated and timed temperature controls, or occupancy load limits.

C. Incorporate shade trees, adequate in number and proportional to the project size, throughout the project site to reduce building heating and cooling requirements.

D. Use fleet vehicles that run on clean-burning fuels as may be practicable.

Local Carbon Monoxide Impacts

The Traffic Assessment prepared for the Proposed Project (see Appendix G and Section 4.16 Traffic and Transpiration) presents analysis of LOS at three intersections. These intersections were analyzed under a.m. peak hour and p.m. peak hour conditions. The intersection of Nelson Avenue and County Center Drive would be signalized under future year conditions. As stated in Section 4.16 Traffic and Transportation, all three intersections would operate at LOS D or better. Therefore, using the significance thresholds provided in Section 4.3.1 Environmental Setting, at these intersections, the impact of the Proposed Project on CO air quality is considered less than significant (KD Anderson 2014a).

c)	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

As stated above in Section 4.3.1 Environmental Setting, Butte County is designated as a nonattainment area for State ozone standards (1-hour and 8-hour) and federal ozone standard (8-hour), State PM_{10} standard, and State and federal $PM_{2.5}$ standards. As described under item b), implementation of mitigation measures AQ-1, AQ-2, and AQ-3 would reduce construction-related and long-term operational emissions impacts to a less than significant level. Because mitigation would reduce the Proposed Project's emissions to a less than significant impact, the Proposed Project is not considered to result in a cumulatively considerable net increase of ozone, PM_{10} or $PM_{2.5}$ emissions. Therefore, a less than significant impact would occur.

d)	Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Air quality regulators typically define sensitive receptors as schools (preschool-12th grade), hospitals, resident care facilities, residences or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. A project would have a significant impact on a sensitive receptor if it would result in an unacceptable health risk due to exposure to TACs that would be emitted from the project. The IS/MND examined the Proposed Project for emissions of the TAC asbestos (NOA) and emissions from motor vehicles.

The Proposed Project would be located at the existing Butte FS and UHQ on Nelson Avenue. The nearest sensitive receptors are several public and private schools located within one mile of the Project site. Prospect High School/OUHSD Community Day School is located approximately 0.25 mile south, Mesa Vista School and Nelson Middle School are located approximately 0.50 mile west, Plumas Avenue School is located approximately 0.45 mile southwest, and Saint Thomas Catholic School and Bird Street School are located approximately one mile southeast of the Project site (City of Oroville 2009; Google 2014).

Construction activities would result in emissions of diesel particulate matter from heavy construction equipment used on-site and truck traffic to and from the site, as well as minor amounts of TAC emissions from motor vehicles (such as benzene, 1, 3-butadiene, toluene, and xylenes). Health effects attributable to exposure to diesel particulate matter are long-term effects based on chronic (i.e., long-term) exposure to emissions. The Proposed Project would involve locating fuel storage tanks on the Project site. If uncontrolled, the fueling of motor vehicles could potentially result in the release of TAC emissions. However, as described in Section 2.6 Regulatory Requirements, Permits, and Approvals, implementation of the Proposed Project would require an Authority to Construct Permit from the BCAPCD. The APCD Rule 213, Storage of Petroleum Products, would require

installation of emission control devices on the proposed fuel storage tanks. With installation of these emission control devices, the Project would not expose sensitive receptors to substantial pollutant concentrations.

As noted above, both short-term construction and long-term operation and maintenance of the Proposed Project would be mitigated to a less than significant level with the implementation of mitigation measure AQ-1, AQ-2, and AQ-3. For the reasons described above, the Project would not expose sensitive receptors to substantial pollutant concentrations, and the impact is considered less than significant.

e)	Would the project create objectionable odors affecting a substantial number of people?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Construction of the Proposed Project could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. However, construction equipment would be operating at various locations throughout the Project site, and any construction activities near sensitive receptors would be temporary. Additionally, long-term operations of the Butte FS and UHQ would not include large amounts of heavy equipment exhaust that could potentially produce odor compounds. Any odor compounds produced by operations would be minimal and be contained within the property. Therefore, a less than significant impact would occur.

4.4 Biological Resources

4.4.1 Environmental Setting

A Biological Resource Assessment (BRA) was prepared for the Proposed Project by ECORP Consulting Inc. (ECORP 2014a; Appendix C). The purpose of the assessment was to collect information on the biological resources present on the site, and to determine any potential biological constraints to site construction. The BRA analyzed the Project site and the potential for sensitive vegetation communities and special-status plant and wildlife species, including species listed as endangered or threatened under the California or Federal Endangered Species Act (CESA or FESA), to occur on the site (ECORP 2014a). To estimate the extent and approximate location of potential Waters of the U.S. and Waters of the State, including wetlands on the site, a review was conducted of existing databases including U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory online database, and Natural Resources Conservation Services (NRCS) soil survey data. A general list of potentially occurring special-status plants and wildlife species for the site was developed following review of California Native Plant Society Electronic Inventory, Calflora, California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDB), and U.S. Fish and Wildlife Service (USFWS) species lists.

The literature review was supplemented by a field investigation conducted by ECORP on 12 March 2014. Biological resource information that was collected included:

- Potential Waters of the U.S.;
- Plant and animal species directly observed;
- Characterization of habitats present on-site;

- Animal signs (e.g., scat, tracks);
- Active bird nests;
- Burrows and any other special habitat features; and
- Representative site photographs.

The BRA is included as Appendix C and the findings are summarized below.

Vegetation Communities

Plant communities on-site are typical of developed urban infrastructure. Numerous ornamental trees including plum (*Prunus* sp.), zelkovia (*Zelkovia* sp.), juniper (*Juniperus* sp.), European olive (*Olea europa*), silk tree (*Albizia julibrissin*), ornamental pine (*Pinus* sp.), eucalyptus (*Eucalyptus* sp.), and small native blue oak (*Quercus douglasii*) occur in planters and at the perimeter of the property. Shrubs, including boxwood (*Buxus sempervirens*), Chinese photinia (*Photinia serrulata*), oleander (*Nerium oleander*), bottlebrush (*Callistemon* sp.), firethorn (*Pyrocantha* sp.), and pittosporum (*Pittosporum* sp.), are abundant, and ground covers, including English ivy (*Hedera helix*) and rosemary (*Rosmarinus officinalis*) underlay shrubs in places. Annual weedy species including mustards (*Brassicaceae*), scarlet pimpernel (*Anagallis arvensis*), grasses (*Avena fatua*, *Bromus diandrus*, *Festuca perrenis*), storksbill (*Erodium botrys*), ragwort (*Scenecio vulgaris*), hairy hawkbit (*Leontodon taraxicoides*), and dandelion (*Taraxicoides* sp.) occur under trees in unpaved areas and planters (ECORP 2014a).

Wildlife

The Butte FS and UHQ is located within a generally urban setting, with government buildings, maintenance facilities, offices and residences surrounding the property to the west, north, and east. The property itself is fully developed with buildings, pavement, planter boxes and lawns, and utility infrastructure. Wildlife habitat on-site consists of planted ornamental and native trees and shrubs which provide nesting and foraging habitat for birds including mourning dove (*Zenaida macroura*), western scrub jay (*Aphelocoma californica*), Northern mockingbird (*Mimus polyglottos*), European starling (*Sturnella neglecta*), and other human commensal species. Planter boxes and unpaved edge areas provide habitat for western fence lizard (*Sceloporus occidentalis*), deer mouse (*Peromyscus maculatus*), house mouse (*Mus musculus*), and Norway rat (*Rattus norvegicus*) (ECORP 2014a).

Relatively large eucalyptus trees occur at the western and northern edge of the property. These trees may provide suitable nesting habitat for raptors, although, none were observed during the reconnaissance survey conducted in March 2014. Other birds that may nest in these trees and understory shrubs include white-breasted nuthatch (*Sitta carolinensis*), house finch (*Haemorhous mexicanus*), and American robin (*Turdus migratorius*). The eaves under the lesser-used buildings on-site provide potential nesting habitat for black phoebe (*Sayornis nigricans*) and several other species. Most birds, including these common species, are protected under the Migratory Bird Treaty Act (MBTA) during their nesting periods (ECORP 2014a).

Soils

There is one soil unit mapped within the site. This soil is (318) Thompsonflat – Oroville Complex, 0 – 9 percent slopes. This soil is not known to contain hydric inclusions (ECORP 2014a).

Potential Waters of the U.S.

The site is completely developed and no Waters of the U.S. occur on site.

Special-Status Plants

No special-status plants have been found or are expected within the Project site. The Project site is completely developed and dominated by ornamental trees, lawn, and roadside weeds. In addition, the Project site does not have any undeveloped ground or soil characteristics required by rare plant species known from the general area (ECORP 2014a).

An arborist survey has not been conducted, but the site supports several large eucalyptus trees along the western and northern boundaries. If a tree has a diameter at breast height of 24 inches or greater, the tree will be protected by the Oroville Tree Ordinance. Eucalyptus trees along the western edge appear to be within the city easement and a permit may be required prior to removal. Eucalyptus within the northern boundary appear to be smaller than 24 inches in diameter and may not be covered under the Oroville tree ordinance. Large-stature native trees including mature oaks (*Quercus* sp.) were not documented within the property, although small oaks are present (ECORP 2014a).

Special-Status Wildlife

Although no determinate-level surveys have been conducted on the subject property, no special-status animal species were found within the Project site during the field reconnaissance. Given the degree of historical and current disturbance at this active fire station site, most special-status species documented from the surrounding area are not expected on-site. A list of special-status species that have potential to occur in the Project vicinity is provided in Appendix C. The proposed Project site does not support aquatic habitat for special-status aquatic invertebrates, fish, reptiles, or wading birds so these will not be discussed further. In addition, elderberry shrubs (*Sambucus* sp.), the obligate host plant for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), are not present on-site, so this species is considered absent (ECORP 2014a). Table 6 provides a list of special-status species with potential to occur on the Project site and descriptions of these special-status species are provided below.

Table 6. Special-Status Species with Potential to Occur on the Project Site

Common Name	Scientific Name
Birds	
White-tailed kite	*Elanus leucurus*
Cooper's hawk	*Accipiter cooperii*
Swainson's hawk	*Buteo swainsoni*
Nuttall's woodpecker	*Picoides nuttallii*
Yellow-billed magpie	*Pica nuttalli*
Oak titmouse	*Baeolophus inornatus*
Lark sparrow	*Chondestes grammacus*
Mammals	
Western mastiff bat	*Eumops perotis californicus*
Silver-haired bat	*Lasionycteris noctivagans*

Source: ECORP 2014a, Appendix C

Birds

Special-status birds documented near the Project site that have some potential to use the site include white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), Swainson's hawk (*Buteo swainsoni*), Nuttall's woodpecker (*Picoides nuttallii*), yellow-billed magpie (*Pica nuttalli*), oak titmouse (*Baeolophus inornatus*), and lark sparrow (*Chondestes grammacus*). Of these, white-tailed kite, Swainson's hawk, and lark sparrow are considered to have low potential for nesting given the on-site conditions and marginal quality of habitat available for these species. Nuttall's woodpecker was observed on the site; however, is considered to have low potential to nest on-site due to the marginal quality of habitat and likely uses the site for foraging (ECORP 2014a).

Mammals

The Project site does not provide potential habitat for any special-status terrestrial mammals. However, two bats species, Western mastiff bat (*Eumops perotis californicus*) and silver-haired bat (*Lasionycteris noctivagans*), are considered to have low potential to occur on the Project site. Both species have been documented nearby. The Western mastiff bat is not listed pursuant to either CESA or FESA, but is considered a species of special concern by CDFW. This species usually uses rocky ledges, cliff faces, and exfoliating rock for roosting, but they occasionally use structures with awnings, ledges, and open rafters. Although unlikely, suitable habitat may be present in and around some of the lesser-used buildings and structures on the Project site. The silver-haired bat maternity roosts are almost exclusively in trees, either inside tree cavities, snags, and/or under exfoliating bark. It is not listed pursuant to either CESA or FESA, but is tracked by CNDDB. The large eucalyptus trees along the west and north edges of the property may provide roosting habitat for this species (ECORP 2014a).

Wildlife Movement Corridors

The Project site is fenced and located within an urban city center, with government buildings and residential housing occurring to the west, north, and east. A large builders' supply store and associated parking lot occur to the southwest, and a busy road bounds the Project site to the south. The site probably does not function as a movement or migratory corridor except generally for common avian species (ECORP 2014a).

4.4.2 Regulatory Setting

Federal Regulations

Federal Endangered Species Act

The FESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and the National Marine Fisheries Service. Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided

the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the U.S. Army Corps of Engineers (USACE). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board.

State or Local Regulatory Requirements

California Endangered Species Act

The CESA generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians and reptiles, birds and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (California Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

California Streambed Alteration Notification/Agreement

Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines, which provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

City of Oroville General Plan 2030

The City of Oroville General Plan represents values, ideals and aspirations that will govern Oroville through 2030. It addresses land use, community character, circulation and transportation, open space, natural resources and conservation, public facilities and services, safety, and noise, and is designed to be comprehensive, internally consistent, and to provide long-term guidance for the community. The conservation element addresses the conservation, development, and use of natural resources including water, forests, soils, rivers, and mineral deposits.

Butte County General Plan 2030

The Butte County General Plan 2030 combines a conservation element and an open space element into a single conservation plan that addresses their similar concerns. The element addresses conservation, development and utilization of natural resources, including forests, soils, rivers and other waters, fisheries, wildlife, minerals, water, and hydrology. The Government Code also identifies a series of six types of open space that must be addressed in the Butte County General Plan, including preservation, managed production of resources, outdoor recreation and scenic resources, public health and safety, military, and Native American Sacred sites.

Butte Regional Conservation Plan

Butte County is currently in the planning phase of Butte Regional Conservation Plan (BRCP), a joint HCP/NCCP that would establish an organized system for permitting and mitigating the incidental take of threatened and endangered species in the Planning area (BRCP 2011; CDFW 2014a). The Proposed Project is located in the City of Oroville which is situated within an Urban Permit Area boundary (UPA) designated by the BRCP (BRCP 2012).

City of Oroville Municipal Code Tree Preservation

The City of Oroville Municipal Code (Section 26-16.060) defines protected trees as any tree on public property, or any tree on private property with a trunk diameter of at least 24 inches and 54 inches above grade. A permit is generally required for removal of protected trees unless personal injury or property damage is threatened.

4.4.3 Biological Resources (IV.) Environmental Checklist and Discussion

a)	Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

As previously described in Section 1.3 Surrounding Land Uses/Environmental Setting, the Project site is currently developed and contains the existing Butte FS and UHQ. The existing topography of the site is relatively steep and slopes to the southwest approximately 30 feet across the site. The Project site is almost entirely paved except for a small unpaved area in the northwestern corner of the site. This area is primarily compacted dirt with a gravel path connecting the site to the Butte County Fire Department-owned land to the north. Vegetation consists of landscaping, particularly ornamental trees and shrubs planted on the southern boundary and northeastern corner. A thick stand of eucalyptus trees separates the western site boundary from County Center Road.

Special-Status Bird Species

Ornamental trees located throughout the Project site and trees along the western and northern edge of the property provide potential suitable nesting habitat for seven special-status bird species and other nesting raptors and birds. The seven special-status bird species include white-tailed kite, Cooper's hawk, Swainson's hawk, Nuttall's woodpecker, yellow-billed magpie, oak titmouse, and lark sparrow (see Table 6 above). While there is only marginally suitable habitat on-site for white-tailed kit, Swainson's hawk, Nuttall's woodpecker, and lark sparrow, there is still potential for these species to occur on-site. All native birds, including raptors, are protected under the Fish and Game Code and the Federal MBTA. To ensure that there are no impacts to protected active nests, Mitigation Measure BIO-1 shall be implemented to reduce potentially adverse effects to all nesting raptors and birds to a less than significant level.

Mitigation Measure

BIO-1 Pre-Construction Nesting Raptor, Bird, and Swainson's Hawk Survey

A. For nesting raptors, conduct a pre-construction nesting raptor survey for all suitable habitat on the Project site and within 0.25 mile of the Project site within 7 days prior to initiation of construction activity during the nesting season (February 1 through August 31).

B. For all other birds protected under the MBTA, conduct a pre-construction nesting bird survey for all suitable habitat on or immediately adjacent to the Project site within 7 days prior to initiation of construction activity during the nesting season (February 1 through August 31).

C. For Swainson's hawk, conduct a pre-construction nesting bird survey for all suitable habitat on the Project site and within 0.5 mile of the Project site within 7 days prior

to initiation of construction activity during the nesting season (February 1 through August 31).

D. If active raptor, bird, or Swainson's hawk nests are found, the active nests will be monitored for the first 24 hours prior to any construction-related activity to establish a behavioral baseline. A no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in accordance with CDFW's recommendations for buffer distances relative to the species identified. Once construction activities commence on-site, all nests will be monitored by a qualified biologist to detect any behavioral changes as a result of construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing that change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures that will mitigate any significant effects to a less than significant level. Pre-construction surveys are not required for construction activity outside the nesting season.

E. If no active raptor, bird, or Swainson's hawk nests are found, no further measures pertaining to active nests are necessary.

Special-Status Bat Species

The Project site provides potential suitable habitat for two special-status bat species: Western mastiff bat and silver-haired bat (see Table 6 above). Rarely used buildings and structures located on the Project site may provide suitable roosting habitat for Western mastiff bat. Large trees located along the western and northern edge of the property may provide suitable roosting habitat for the silver-haired bat. Construction activities could adversely impact these bat species if active bat roosts are present on-site. Implementation of Mitigation Measure BIO-2 would reduce potential adverse impacts to active bat roosts to a less than significant level.

Mitigation Measure

BIO-2 Pre-Construction Dusk Emergence Survey

A. A minimum of two qualified biologists shall conduct a dusk emergence survey (to start 1 hour before sunset and last 3 hours), followed by a pre-dawn re-entry survey (to start 1 hour before sunrise and last for 2 hours), in addition to a daytime visual inspection of all potential bat roosting habitat on the Project site included as part of the pre-construction clearance survey. If roosting special-species bats are found on-site or adjacent to the Proposed Project during the pre-construction clearance survey, the following measures shall be implemented, in consultation with CDFW, to reduce adverse impacts to special-status bats:

1. Avoid direct and indirect impacts to roosting sites by establishing a no-disturbance buffer of 100 feet around roost sites.

2. Clearing and grubbing near the roost site and lighting near or on the roost site that could potentially interfere with bats entering or leaving the roost shall be prohibited.

3. Operation of internal combustion equipment such as generators, pumps, and vehicles within 100 feet of the roost site shall be prohibited.

4. If needed and in coordination with CDFW, exclusions will be installed at directly affected sites after the end of maternity season (late August). Exclusionary materials, including, but not limited to expandable foam and steel wool, shall be applied selectively and as needed until bats have relocated.

5. Exclusion, if required, will only be performed by a trained bat biologist with current CDFW permits.

b)	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in Section 4.4.1 Environmental Setting, the Project site is currently developed and plant communities on-site are typical of developed urban infrastructure consisting of ornamental trees shrubs, ground covers and annual weedy species and grasses. There is no riparian habitat or other sensitive natural communities on-site. No impact would occur.

c)	Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site does not support Waters of the U.S., including wetlands. No impact would occur.

d)	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As stated in Section 4.4.1 Environmental Setting, the Project site is currently developed and fenced and located within an urban setting. Surrounding land uses include Butte County-owned land

consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex (aka Hall of Records) on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. The Project site may function as a movement or migratory corridor for common avian species; however, the Proposed Project would not impede these species from using the site. It is unlikely the site is used by other species as a movement corridor due to the urban setting and fence surrounding the site. Thus, a less than significant impact would occur.

e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

As stated in Section 4.4.1 Environmental Setting, there are several large eucalyptus trees along the western boundary of the Project site that may be subject to protection under the Oroville Tree Ordinance; however, all trees within the Project site and along the northern boundary are too small to be protected under the Oroville Tree Ordinance. All trees proposed for removal are within the Project site boundary and would not conflict with the Oroville Tree Ordinance.

Although the large eucalyptus trees on the western boundary would not be removed, construction work may occur adjacent to the dripline that could disturb the root zone and result in adverse impacts to the tree. Preventing construction from occurring within the dripline of avoided trees would reduce potential impacts to trees that may be protected by the Oroville Tree Ordinance. Implementation of Mitigation Measure BIO-3 would reduce potential adverse impacts to a less than significant level.

Mitigation Measure

BIO-3 Tree Dripline Avoidance

A. Prior to the initiation of construction activities, construction fencing shall be installed along the western boundary of the Project site at the designated dripline of the eucalyptus trees. The fencing will mark the boundary of the driplines to prevent construction activities from occurring within driplines.

f)	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As stated in Section 4.10 Land Use and Planning, Butte County is currently in the planning phase of BRCP, a joint HCP/NCCP that would establish an organized system for permitting and mitigating the incidental take of threatened and endangered species in the Planning area (BRCP 2011; CDFW 2014). The Proposed Project is located in the City of Oroville which is situated within an Urban

Permit Area boundary (UPA) designated by the BRCP (BRCP 2012). The Proposed Project would be consistent with the existing land use and all development would remain within the UPA boundary. Therefore, the Proposed Project would not conflict with the BRCP. No impact would occur.

4.5 Cultural Resources

4.5.1 Environmental Setting

Cultural Resources

A Cultural Resources Inventory and Architectural History Evaluation Report was prepared by ECORP Consulting, Inc. (ECORP 2014b, Appendix D) for the Proposed Project to determine if cultural resources were present in or adjacent to the Project area and assess the sensitivity of the Project area for undiscovered or buried cultural resources. The land within the Project site is relatively steep and slopes to the southwest with an approximately 30-foot change in elevation across the site. Elevations range between 270 and 300 feet above mean sea level. The Project area has been mostly built up consisting of fire station structures and facilities with a system of paved roads, landscaped areas filling in the area between the structures, and a small unpaved area in the northwestern corner of the site. The cultural context of the Project area including regional and local prehistory, ethnography, and regional and Project area history can be found in Appendix D.

The analysis of cultural resources was based on a records and literature search conducted at the Northeast Information Center of the California Historical Resources Information System at California State University-Chico on February 13, 2014, a literature review, and a field survey. The records and literature search identified 13 previous cultural resource investigations conducted within a 0.5-mile radius of the property, covering approximately 50 percent of the total area surrounding the property within the records search radius (ECORP 2014b).

The records search of previous studies revealed the presence of three resources associated with historic gold mining activities and fire base facilities within a 0.5-mile radius of the property. Prehistoric lithic scatters and habitation sites, and historical sites, including rock walls and sites associated with historic mining activities, have been previously recorded outside of the 0.5-mile radius. The gold mining sites (dredge tailings) are not on the Butte FS and UHQ property. The other previously recorded resource consists of two buildings at the Butte FS and UHQ that had been recorded in 1994 by Mark Thornton as part of CAL FIRE's inventory and evaluation of all CAL FIRE buildings in California. However, a complete archaeological survey of the entire Butte FS and UHQ property had not been previously conducted and the architectural inventory was conducted in 1994. The inventory did not include all of the buildings and structures within the complex and was out of date, thus warranting a pedestrian survey of the site for this Project (ECORP 2014b).

The two previously recorded buildings in the Project area include an equipment maintenance building and the main equipment garage and office building. These buildings were constructed in 1937 and 1940, respectively. The two buildings were individually evaluated by Thornton in 1994 as not eligible for listing on the National Register of Historic Places (ECORP 2014b).

A search of the Sacred Lands File by the Native American Heritage Commission (NAHC) showed no Native American cultural resources in the Project area (ECORP 2014b).

A field survey was carried out on February 13, 2014. The entire Project area was subject to an intensive pedestrian survey using transects at 15-meter intervals. The entire Area of Potential Effect (APE) surrounding the structures was walked, including an open grass field located northeast of the

station that was originally proposed to be used as an equipment staging area. Overall, the majority of the surface area within the APE has been disturbed by fire station facilities, pavement, or heavily landscaped areas of ornamental shrubs, trees, and grasses. Less than 5 percent of the APE contained exposed soil, which appeared to have been modified by either construction or general ground disturbance. As a result of the archaeological survey, no indications of prehistoric resources were observed. Several buildings within the Project area that were not previously identified were recorded during the current survey. They are described in Section 5.5.3 of Appendix D and a complete construction history of these buildings is presented in Section 5.6.1 of Appendix D. In addition to the two buildings constructed in 1937 and 1940, there are other buildings that are more than 50 years old that were built during the 1950s and 1960s.

Paleontological Resources

A paleontological records search and preconstruction assessment was prepared by ECORP Consulting, Inc. (ECORP 2014c, Appendix E) for the Proposed Project to determine if paleontological resources were present in or adjacent to the Project area and assess the sensitivity of the Project area, whether known occurrences of paleontological resources are present within or immediately adjacent to the Project area, and whether implementation of the Project could result in significant impacts to paleontological resources. The University of California Museum of Paleontology (UCMP) database results, more details about the geology, and the probability of finding fossil specimens can be found in the assessment in Appendix E.

A paleontological database search of the paleontology locality and specimen collection records for the Project area and surrounding area (0.5 mile radius) was requested from the UCMP in June 2014. Additional information from a query of the UCMP online catalog records, a review of regional geologic maps from the California Geological Survey, and a review of existing literature on paleontological resources of Butte County was used to provide information about paleontological resources (ECORP 2014c).

According to the Geologic Map of the Chico Quadrangle, California, the geologic unit that underlies the Project area is classified as Tuffs of Oroville Point (ECORP 2014c). This formation is described generally as interbedded volcaniclastic deposits of gravel, sand, and tuff (volcanic ash) deposited to the south and west of the town of Oroville during the Pliocene and Pleistocene epochs. Rock units such as the Oroville Tuffs, for which little information is available, are considered to have undetermined fossiliferous potential, and a nearby study recommended the Oroville Tuffs to be potentially significant, pending additional field confirmation (ECORP 2014c).

The Soil Resource Report for Butte Area, California, Parts of Butte and Plumas Counties, published by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) indicates that the soil type on-site corresponds to the Thompsonflat-Oroville, 0 to 9 percent slopes (NRCS 2014). This soil type is Thompsonflat-Oroville is composed of two units, Thompsonflat and Oroville. Thompsonflat is a fine sandy loam from 0 to 80 inches (0 to 6.7 feet) below the ground surface. Beyond 80 inches lies loamy alluvium over clayey alluvium over sandy and gravelly alluvium derived from igneous and metamorphic rock. Oroville is a gravelly fine sandy loam to approximately 20 to 40 inches (1.7 to 3.3 feet) below the ground surface due to duripan present at that depth (NRCS 2014).

4.5.2 Regulatory Setting

Cultural Resources Obligations Under CEQA

CEQA (Title 14, CCR, Article 5, Section 15064.5) applies to cultural resources of the historical and prehistoric periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly is a project that may have a significant impact on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources.

Generally, significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) or the National Register of Historic Places (NRHP) (36 CFR 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered to be Historical Resources (significant) under CEQA. A resource can also be a historical resource if it is included in a local register of historical resources (as defined by PRC Sec. 5020.1[k]), or identified in an historical resource survey meeting the requirements of PRC Sec. 5024.1(g) (presumption of historical significance) or is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria and the resource must retain integrity.

Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)]. Resources that have been evaluated and found to not be Historical Resources under CEQA are not afforded any further consideration under CEQA.

The Lead Agency (in this case, CAL FIRE) is responsible for ensuring compliance with mitigation measures for Historical Resources, as defined by CEQA, in order to reduce impacts. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, Mitigation Monitoring or Reporting, "the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the Project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program."

To meet the regulatory requirements of the Project, a cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within CEQA (Pub. Res. Code § 21000 et seq.). The standing structures identified by the survey of the Project area and that would be subject to impacts as a result of the Project were evaluated for significance using CRHR eligibility criteria. If determined not eligible, there would be no significant impacts to Historical Resources. If determined eligible and significant impacts would occur as a result of demolition or alteration, then mitigation could consist of either avoidance by preserving them in dedicated open space or by carrying out photographic and historical documentation efforts prior to Project approval, implementation, or demolition.

Local Regulations

Oroville 2030 General Plan

The Oroville General Plan identifies the following applicable goals and policies to provide further protection to cultural and historical resources:

Goal OPS-14 Preserve Oroville's cultural resources, including archaeological, historic and paleontological resources, for their aesthetic, scientific, educational and cultural values.

Policies

P14.1 Require consultation with the Northeast Information Center of the California Historical Resources Information System and completion of a records search as part of review of proposed development projects to determine whether the project site contains known prehistoric or historic cultural resources and/or to determine the potential for discovery of additional cultural resources and the necessity of further investigation.

P14.2 Require applicants for projects identified by the Northeast Information Center as potentially affecting cultural resource sites or in need of further investigation to hire a consulting archaeologist or historian (as applicable) to conduct inventory and evaluation studies and develop an cultural resources mitigation plan and monitor the project to ensure that mitigation measures are implemented, as necessary.

P14.3 Require that areas found during construction to contain significant historic or prehistoric archaeologic artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation. Require that historic or prehistoric artifacts found during construction be examined by a qualified consulting archaeologist or historian to determine their significance and develop appropriate protection and preservation measures as necessary.

P14.5 Consult with qualified paleontologists to identify and protect Oroville's significant paleontological resources.

P14.7 If cultural resources, including archaeological or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

P14.8 If human remains are located during any ground disturbing activity, work shall stop until the County Coroner has been contacted, and, if the human remains are determined to be of Native American origin, the NAHC and most likely descendant have been consulted.

Goal OPS-15 Protect the City of Oroville's Native American heritage.

Policies

P15.1 Treat with respect and dignity any human remains discovered during implementation of public and private projects within the Planning Area

and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.

4.5.3 Cultural Resources (V.) Environmental Checklist and Discussion

a)	Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Two Butte FS and UHQ buildings are listed in the Oroville General Plan, Table OPS-3 Historic Resources. This table includes properties or structures that are listed or appear to meet the criteria for listing in the NRHP and/or CRHR. These two Oroville Ranger Unit HQ buildings had been previously recorded in 1994 by Mark Thornton as part of CAL FIRE's inventory and evaluation of all CAL FIRE buildings in California and may have appeared to meet the criteria but they are not listed in the NRHP or the CRHR (City of Oroville 2009). The individual buildings and the entire complex of buildings that comprise the Butte FS and UHQ were evaluated during the current (2014) study by ECORP. Based on a historic context and the characteristics of the buildings, the Butte FS and UHQ buildings were evaluated as not eligible for the CRHR under Criteria 1, 2, 3, and 4 and not eligible for the NRHP under Criteria A, B, C, and D (ECORP 2014b). Therefore, they are not considered a Historical Resource under CEQA [CCR Title 14, Section 15064.5(a)] or a historic property under the NHPA. Because there are no Historical Resources in the Project area, there would be no significant impacts to Historical Resources from the demolition of the existing buildings. No impact would occur.

b)	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

According to the cultural resources inventory report (ECORP 2014b, Appendix D), no archaeological resources were identified within the Project area as a result of the records search and field survey. Although no archaeological resources were identified, the potential for unrecorded archaeological resources below the ground surface exists. These resources may be disturbed during construction of the Proposed Project. Impacts to unknown resources would be less than significant with the implementation of Mitigation Measure CR-1.

Mitigation Measure

CR-1 Unanticipated Discovery of Cultural Resources

A. If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites

established by the Native American Heritage Commission, will be required if the nature of the unanticipated discovery is prehistoric.

B. Work cannot continue within the no-work radius until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.

C. If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and Project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility and, if eligible, total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the lead agency as verification that the provisions in CEQA for managing unanticipated discoveries have been met.

D. In the event that evidence of human remains is discovered, construction activities within 100 feet of the discovery will be halted or diverted and the requirements of this mitigation measure will be implemented. In addition, the provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. When human remains are discovered, state law requires that the discovery be reported to the County Coroner (Section 7050.5 of the Health and Safety Code) and that reasonable protection measures be taken during construction to protect the discovery from disturbance (AB 2641). If the Coroner determines the remains are Native American, the Coroner notifies the Native American Heritage Commission, which then designates a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted, to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

c)	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

According to the paleontological assessment (ECORP 2014c, Appendix E), there are no fossil vertebrate localities located on or within a 0.5 mile radius of the Project area. The Oroville Tuffs geologic unit present within the Project area has undetermined fossiliferous potential and could be significant for containing nonrenewable paleontological resources; however, the Project would be developed in an area that has already undergone significant subsurface ground disturbance from the construction of the existing Butte FS and UHQ. Therefore, the Project is unlikely to directly or indirectly destroy significant fossils or unique geologic features. Impacts to paleontological resources would be less than significant with the implementation of Mitigation Measure CR-2.

Mitigation Measure

CR-2 Unanticipated Discovery of Paleontological Resources

A. In the event that any fossil materials are encountered during ground-disturbing project-related activities, all activities must be suspended in the vicinity of the find. A paleontologist shall be obtained and empowered to halt or divert ground-disturbing activities. A plan for monitoring and fossil recovery must be completed and implemented before ground-disturbing activities can recommence in the area of the fossil find to allow for the recovery of the find. Recovered fossils shall be analyzed to a point of identification and curated at an established accredited museum repository with permanent retrievable paleontological storage. A technical report of findings shall be prepared with an appended itemized inventory of identified specimens and submitted with the recovered specimens to the curation facility.

d)	Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

According to the cultural resources inventory report (ECORP 2014b, Appendix D), a search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources within the Proposed Project area. While there is no reason to suspect the presence of human remains in the Project area, it is possible that currently unknown remains may occur. In the event that evidence of human remains is discovered, the requirements of Mitigation Measure CR-1 would be implemented. The Proposed Project would have less than significant impacts with the implementation of Mitigation Measure CR-1.

4.6 Geology and Soils

4.6.1 Environmental Setting

Geomorphic Setting

The Proposed Project is in the north central portion of the City of Oroville, in Butte County at the base of the Sierra Nevada foothills in northern California. The Project site and surrounding area is underlain by the Plio-pleistocene Tuffs of Oroville Formation consisting of interbedded volcaniclastic deposits of gravel, sand and tuff (volcanic ash) within the Great Valley Geomorphic Province. The Great Valley is an alluvial plain, about 50 miles wide and 400 miles long, between the Coast Ranges and Sierra Nevada (ECORP 2014c; URS 2014a).

Regional Seismicity and Fault Zones

An active fault, according to the California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered inactive.

The Project area has no active or inactive faults; however, it does lie within 6.5 miles of the Cleveland Hill Fault, which is part of the Foothills fault system, northern reach section (USGS 2006).

This fault is classified as an Alquist-Priolo Special Studies Zone and was last active in 1975 with a 5.7 magnitude earthquake (CGS 1977). The Oroville General Plan states this fault would be capable of producing an earthquake of magnitude of 6.5 to 6.7 on the Richter scale in the future (City of Oroville 2009). Seismic hazard zone maps have not been published by the California Geological Survey in this area.

Soils

According to the Soil Resource Report for Butte Area, California, the native soils within the Project site consist of one soil map unit called the Thompsonflat-Oroville, 0 to 9 percent slopes. Thompsonflat is a fine sandy loam from 0 to 80 inches (0 to 6.7 feet) below the ground surface. Beyond 80 inches lies the parent material of loamy alluvium over clayey alluvium over sandy and gravelly alluvium derived from igneous and metamorphic rock. Oroville is a gravelly fine sandy loam to approximately 20 to 40 inches (1.7 to 3.3 feet) below the ground surface due to duripan present at that depth. This soil occurs at elevations of 120 to 260 feet, in a climate with mean annual rainfall of 22 to 30 inches, with warm dry summers and cool moist winters. The mean annual temperature is about 62 degrees Fahrenheit and the frost free season is approximately 255 days (NRCS 2014).

4.6.2 Geology and Soils (VI.) Environmental Checklist and Discussion

a)	Would the project 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.	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐
	ii)	Strong seismic ground shaking?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐
	iii)	Seismic-related ground failure, including liquefaction?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐
	iv)	Landslides?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

i and ii) The Project area is not located in a Fault-Rupture Hazard Zone / Alquist-Priolo Earthquake Fault Zone. The risk of fault rupture within the site is low due to the absence of any known active faults in the site. The nearest active fault is the Cleveland Hill Fault that is approximately 6.5 miles from the Project site. The Cleveland Hill fault is classified as an Alquist-Priolo Special Studies Zone and had activity in 1975 with a 5.7 magnitude earthquake (URS 2014a; CGS 1977; USGS 2006). A less than significant impact would occur.

Strong seismic ground shaking does have potential to occur due the nearby and active Cleveland Hill fault. However, according to *Geotechnical Report, Butte Fire Station/Unit Headquarters – Replace Facility Project* (URS 2014a; Appendix F), the design peak ground acceleration in the vicinity of the site, in accordance with Section 1803.5.12 of the 2013 California Building Code, is 0.232g (URS 2014a). The Project would be compliant with the 2013 Building Code Seismic Design Parameters. Thus, a less than significant impact would occur.

iii) Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements. Liquefaction generally occurs in areas where the ground water table is less than 50 feet below the surface.

The Oroville General Plan has the Project area mapped as "generally low liquefaction potential" due to the older alluvial sediments underlying the Project area and the Project is not within a 100-year flood zone (City of Oroville 2009). The 2014 geotechnical investigation determined that the subsurface materials at this site are in a sufficiently stiff and dense condition and are not saturated. These characteristics indicate the on-site soils are not likely susceptible to liquefaction. A less than significant impact would occur.

iv) Oroville General Plan has the Project area mapped as outside of areas with "Slopes >30% (generalized)" and/or "hills prone to landslides." The Project site is relatively steep although it is on a less than 30% slope and the soils have a higher density than what would be found in landslide areas. (City of Oroville 2009; URS 2014a) No impact would occur.

b)	Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Best Management Practices (BMPs), included as part of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the Proposed Project would be implemented to manage erosion and the loss of topsoil during construction-related activities (see Hydrology and Water Quality (IX.) Environmental Checklist and Discussion). Soil erosion impacts would be reduced to a less than significant level.

c)	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

Native soils on-site are stable and would not result in landslides, liquefaction or collapse (see item a) discussion above); however, the soils do have high-plasticity clays near the surface at the center of the site. High-plasticity clays can potentially shrink and swell, resulting in differential ground movement beneath foundations. Based on the plasticity index test results in the geotechnical report, the upper 3 feet of soil underlying the site generally has a potential for shrink-swell behavior (URS 2014a). Specific removal, fill and re-compaction recommendations are provided in the geotechnical evaluation. Impacts would be less than significant with implementation of Mitigation Measure GEO-1.

Mitigation Measure

GEO-1 Site-Specific Geotechnical Design Recommendations

A. The site-specific recommendations from Section 4.0 of the *Geotechnical Report, Butte Fire Station/Unit Headquarters – Replace Facility Project* shall be incorporated into site designs and plans by the engineering contractor and followed prior to and during site preparation, grading and construction by the construction contractors.

d)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

According to the 2014 geotechnical investigation, the Project site soils are potentially expansive with high-plasticity clays near the surface at the center of the site. High-plasticity clays can potentially shrink and swell, resulting in differential ground movement beneath foundations. As stated above, based on the plasticity index test results, the upper 3 feet of soil underlying the site generally has a potential for shrink-swell behavior (URS 2014a). Impacts would be less than significant with implementation of Mitigation Measure G-1.

e)	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Septic tanks or alternative wastewater disposal systems are not part of the Proposed Project design. No impact would occur.

4.7 Greenhouse Gas Emissions

As previously noted in Section 4.3 Air Quality, an Air Quality Study, which includes an analysis of greenhouse gas emissions, was prepared for the Proposed Project by KD Anderson & Associates (KD Anderson 2014a; Appendix B). The findings of the Air Quality Study addressing greenhouse gas emissions associated with the Proposed Project are summarized in this section.

4.7.1 Environmental Setting

The main source of greenhouse gas (GHG) emissions associated with the Proposed Project would be short-term combustion of fossil fuels during construction activities and a slight increase in operational vehicle trips. The generation of GHG emissions has the potential to affect climate on a global scale. Pursuant to AB 32, the California Air Resources Board (CARB) prepared and adopted the Climate Change Scoping Plan. The Climate Change Scoping Plan outlines the State's strategy to achieve the year 2020 GHG emissions limits specified in AB 32. The Climate Change Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California (KD Anderson 2014a).

Significance Thresholds

Neither the Butte County AQMD nor the City of Oroville has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used in this Air Quality Study is based on a threshold developed by the California Air Pollution Control Officers Association (CAPCOA). The CAPCOA document C*EQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* presents a 900 metric ton per year (MT/yr) of CO_2e screening threshold. The CAPCOA threshold is considered a conservative threshold set at a level to "capture" or define 90 percent of land use development projects as significant. The CAPCOA document notes:

> *"A single quantitative threshold was developed in order to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission threshold low enough to capture a substantial fraction of future residential and nonresidential development that will be constructed to accommodate future statewide population and job growth, while setting the emission threshold high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions."*

If the Proposed Project would generate more than 900 MT/yr of CO_2e, the project is considered to have a significant impact on global climate change. If the project would generate 900 MT/yr of CO_2e or less, the project is considered to have a less than significant impact on global climate change. The 900 MT/yr of CO_2e threshold is applied to both construction-related emissions and operational GHG emissions.

4.7.2 Greenhouse Gas Emissions (VII.) Environmental Checklist and Discussion

a)	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Construction-Related Emissions

The Proposed Project would result in 290.87 MT/yr of construction-related CO_2e emissions in 2016, and 118.40 MT/yr of CO_2e emissions in 2017. The total for the 18-month long construction period would be 409.26 MT. All of these values are less than the 900 MT/yr of CO_2e significance threshold. Therefore, construction-related GHG emissions from the Proposed Project would have a less than significant effect on the environment.

Operational Emissions

As described in Section 4.3 Air Quality and Section 4.16 Traffic and Transportation, the Proposed Project would result in a net increase of 10 vehicle trips per day. This would result in the generation of increased GHG emissions associated with operation of the facility when compared to current conditions. The Proposed Project would result in a net increase of 329.37 MT/yr of CO_2e emissions. This value is less than the 900 MT/yr of CO_2e significance threshold. Therefore, the impact of operational GHG emissions from the Proposed Project is considered less than significant.

b)	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As previously stated in Section 4.7.1 Environmental Setting, pursuant to AB 32, CARB prepared and adopted the Climate Change Scoping Plan. The Climate Change Scoping Plan outlines the State's strategy to achieve the year 2020 GHG emissions limits specified in AB 32. The Climate Change Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California. However, CARB has not yet determined what amount of GHG reductions it recommends from local government operations. The Climate Change Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined (KD Anderson 2014a).

As previously described in Section 4.7.1 Environmental Setting, neither the Butte County APCD nor the City Oroville has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used is based on a threshold developed by CAPCOA (KD Anderson 2014a). As stated under item a), the Proposed Project would not exceed the 900 MT/yr of CO_2e significance threshold for construction-related and operational emissions. The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact is considered to be less than significant.

4.8 Hazards and Hazardous Materials

4.8.1 Environmental Setting

The California Code of Regulations defines hazardous materials as substances with physical characteristics that could trigger a considerable present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed (City of Oroville 2010). Hazardous materials are grouped into the following four categories, based on their characteristics:

- Toxic – causes human health effects

- Ignitable – has the ability to burn
- Corrosive – causes severe burns or damage to materials
- Reactive – causes explosions or generates toxic gases

If handled inappropriately, hazardous material and hazardous waste may result in public health hazards if discharged into the soil, groundwater, or become airborne through the release of vapors, fumes, or dust (City of Oroville 2010). The California Code of Regulations, Title 22, Sections 66261.20-24 describes toxic characteristics that could cause soil or groundwater to be classified as hazardous waste (City of Oroville 2010).

The State agencies overseeing regulatory controls on hazardous materials are the California Environmental Protection Agency (Cal-EPA) and the Office of Emergency Services. The California Highway Patrol and California Department of Transportation (Caltrans) oversee and enforce regulations for hazardous materials transport (CAL FIRE 2002).

The Department of Toxic substances Control (DTSC), a department within Cal-EPA, is the responsible authority for regulating hazardous materials and enforcement (CAL FIRE 2002). According to the DTSC, auto shops generally produce several kinds of potentially hazardous wastes, including waste solvent and coatings; contaminated rags, wipes, and absorbents; empty containers, used oil, waste antifreeze, sanding or grinding dusts, and contaminated wash waters (DTSC 2014a). Similar hazardous wastes are associated with the other facilities that are part of the Butte FS and UHQ. A more detailed discussion of hazardous materials associated with the Butte FS and UHQ is provided below. Hazardous wastes, regulated by the federal government under the Resource Conservation and Recovery Act (RCRA), are commonly referred to as RCRA wastes. Hazardous wastes regulated under State of California laws are referred to as “non-RCRA” or “California only” wastes, which include certain metals such as copper, nickel, and zinc that are not regulated under RCRA (DTSC 2014a). The Proposed Project will comply with federal and state regulations to manage hazardous waste.

Potentially Hazardous Materials On-Site

The Proposed Project is the demolition and replacement of the existing Butte FS and UHQ. Several proposed buildings would manage and store hazardous materials on-site: the auto shop, generator/storage building, two-bay dozer shed, and other site improvements including the construction of a free standing fuel island with above ground fuel tanks. Below are descriptions of hazardous materials associated with each building (see Section 2.3.2 New Butte Fire Station and Unit Headquarters for further descriptions of the buildings).

- Auto Shop - auto shops generally produce several kinds of potentially hazardous wastes, including waste solvent and coatings; contaminated rags, wipes, and absorbents; empty contains, used oil, waste antifreeze, sanding or grinding dusts, and contaminated wash waters (DTSC 2014a).
- Generator/Storage Building – the building would store two parallel 150 kilowatt (KW) propane emergency power generators (120/208 Volts (V), 3-phase) set up as a 300 KW emergency back-up source. In addition, the building would also store hazardous wastes such as gasoline, fuel, and paint thinners. A new propane tank would be located adjacent to the generator/storage building.
- Two-Bay Dozer Shed - the dozer shed would be equipped with an air compressor and a tailpipe connected diesel exhaust extraction system.

- Other Site Improvements
  - A freestanding fuel island would contain one 8,000-gallon tank, split for 4,000 gallons of diesel and 4,000 gallons of unleaded gasoline, and one 500-gallon, aboveground tank for E-85 ethanol. All tanks would be above ground.
  - A 10,000-gallon, three-chambered fire pump test pit.

As discussed in Section 2.1 Project Background, the Butte FS and UHQ was constructed over a period of several decades, starting in 1937, with primary construction occurring in the early 1960s. All facilities were built by 1994, with the exception of the ECC buildings, which were built sometime after 1994. In addition, the majority of the buildings within the complex were renovated in the 1980s. All underground storage tanks were removed and certified; however, there is potential contamination of soil due to buried oils/spills near the existing generator.

As part of the demolition plan for the Proposed Project, a Hazardous Building Materials Survey consisting of sampling potential materials for asbestos, lead paint, and universal waste was conducted on June 11 to 13, 2014 by URS (URS 2014b, Appendix G) for the Proposed Project. As part of the survey, suspect homogeneous asbestos containing materials (ACM) and paint chips samples were collected and sent to Micro Analytical Laboratories in Emeryville, California for analysis.

Asbestos

A total of 50 suspect homogeneous ACMs (109 individual samples) were detected inside the buildings (URS 2014b). Each homogeneous area consisted of at least two individual samples. Twenty of the homogenous materials were found to contain less than 1 percent asbestos. Five of the homogeneous materials were found to contain greater than 1 percent asbestos. The remaining 25 homogeneous materials were found to contain no asbestos. Building materials on-site contain asbestos in concentrations greater than one tenth of one percent (0.1%) (URS 2014b). Disturbing materials containing greater than 0.1% asbestos either through demolition, construction, or maintenance activities triggers regulations enforced by such agencies as Cal-OSHA and Cal-EPA (see Table 1. Asbestos-Containing Materials, Appendix G for a summary of the sample results) (URS 2014b).

Lead in Paint

A total of 23 paint chip samples were collected from painted surfaces at each of the eight surveyed buildings (see Table 2. Lead Containing Materials, Appendix G for a summary of the sample results) (URS 2014b). Lead paint was found in samples taken from the buildings. See Appendix G for a detailed description of the lead containing paint on-site. As described above, disturbing materials through demolition, construction, or maintenance activities triggers regulation enforced by such agencies as Cal-OSHA and Cal-EPA.

Potential Universal Waste/Household Hazardous Waste

An inventory of potential universal waste and household hazardous waste was completed, comprised of materials such as fluorescent light bulbs, light fixture ballasts, thermostats, cleaning supplies, paints, solvents, oils, and antifreeze. These materials pose potential hazards to public health and the environment as they contain polychlorinated biphenyls (PCB), mercury, or are considered to be hazardous waste (URS 2014b).

4.8.2 Hazards and Hazardous Materials (VIII.) Environmental Checklist and Discussion

a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

As previously described in 4.8.1 Environmental Setting, several buildings would support activities that require the use and store of numerous kinds of potentially hazardous materials (see list above) and generate hazardous waste related to vehicle and equipment maintenance. In addition, the Hazardous Building Materials Survey conducted for the Proposed Project recorded buildings containing, asbestos, lead, and universal waste/household hazardous waste on-site (URS 2014b). The Proposed Project would include the transport, short-term storage and use, and disposal of hazardous materials related to construction, demolition, and the operation and maintenance of the new facilities. BMPs stipulating proper storage of hazardous materials and vehicle fueling would be implemented during construction and demolition as part of the Storm water Pollution Prevention Plan (SWPPP) and general construction permit. CAL FIRE and its contractors follow all applicable federal, state, and local regulations, including Cal-OSHA, California Fire Code, and National Fire Protection Association (NFPA) requirements, and manufacturer instructions for the management, storage, and handling of hazardous materials and hazardous waste for the construction, demolition, and operation and maintenance of the Proposed Project. Impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance would be less than significant with implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4.

Mitigation Measures

HAZ-1 Removal of Asbestos Containing Materials (ACM)

A. A work plan/job specification shall be developed for the removal of ACMs. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations require the removal of all ACMs prior to demolition, or renovation. The work plan must take into account access to the materials to be abated and safety issues with the roof.

B. A California Division of Occupational Safety and Health (DOSH)registered asbestos abatement contractor shall remove the asbestos in accordance with all Federal, State, and local regulations, and shall utilize state of the art work practices.

HAZ-2 Hazardous Building Materials

A. Prior to demolition of all buildings on-site, all hazardous materials associated with the facilities shall be removed by a qualified contractor and disposed of in accordance with federal, state, and local regulations.

1. Any individual who contracts to provide health and safety services relating to ACMs must be certified by Cal-OSHA as either a Certified Asbestos Consultant (CAC) or a Site Surveillance Technician (SST) (under the supervision of a CAC). The activities they are certified to provide include: conducting asbestos

surveys, writing work plans or specifications for abatement, monitoring the work of abatement contractors, collecting air samples, and determining if the work area is safe for re-occupancy by non-asbestos workers.

2. If more than 100 square feet of materials that contain greater than one tenth percent (0.1%) asbestos will be abated, materials must be abated by a Cal-OSHA registered asbestos abatement contractor.

3. If ACMs that are classified by Cal-OSHA as miscellaneous materials are present, including drywall and taping mud, vinyl floor tile and mastic, roof mastic, cement siding shingles, and vapor barrier; then removal of these materials is considered a Class II activity according to Cal-OSHA regulations. Work practices and engineering controls for Class II work are specified In Cal-OSHA 8 CCR 1529 (g) (7-8).

4. Friable ACMs greater than one percent (1%) asbestos must be manifested. transported, and disposed of as hazardous waste in accordance with DTSC. Non-friable RACMS (regulated asbestos containing materials) are those asbestos materials that when removed become friable, must be treated the same as friable ACMs.

5. During activities such as demolition, removal, renovation, clean-up and routine maintenance, the Cal-OSHA-specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training.

HAZ-3 Stabilization of Lead Based, and Lead Containing Painted Surfaces

A. A work plan/job specification shall be developed for stabilization of lead based, and lead containing painted surfaces prior to the demolition of the buildings.

B. A California DOSH registered lead paint abatement contractor shall stabilize lead painted surfaces in accordance with all applicable Federal, State, and local regulations and utilizing state of the art work practices.

HAZ-4 Avoidance and Minimization Measures for Personnel

A. All personnel working on the Project site shall be informed of the possibility that contaminated soil, soil vapor, and/or groundwater may be encountered on the job site.

B. If previously unknown contaminated soils are encountered in the field during demolition or grading, ground disturbance activities in the vicinity of the discovery shall cease until a qualified hazardous materials management specialist can assess the potentially hazardous substances and, if necessary, develop appropriate management measures that will mitigate significant effects to a less than significant level in coordination with Cal-OSHA and CVRWQCB.

b)	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

Hazardous materials, such as diesel fuel and oil, would be used during construction and operation and maintenance at the Project site. The release of any hazardous substance to the environment would be prevented through the implementation of BMPs listed in the SWPPP as required by the National Pollutant Discharge Elimination System (NPDES) Permit. In addition, asbestos- and lead-containing materials were found on-site and must be removed and stabilized prior to initiation of demolition of existing facilities.

As stated above in item a), CAL FIRE and contractors would be responsible for disposal of all hazardous waste generated on-site and storage and handling of hazardous substances in accordance with applicable federal, state, and local regulations. Impacts associated with project demolition, construction, and operation and maintenance would be less than significant with implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4.

c)	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

The Proposed Project is the demolition of and replacement of the existing Butte FS and UHQ. Hazardous materials, substances, or waste would be handled consistent with federal, state, and local regulations. Prospect High School/OUHSD Community Day School is the closest school to the Project site, located approximately 0.25 mile south of the Project site (City of Oroville 2009; Google 2014). To ensure impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance are reduced to a less than significant level, Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 shall be implemented.

d)	Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

There are four recorded Leaking Underground Storage Tank cleanup sites located in proximity to the Project site (DTSC 2014b). Below are descriptions of the sites and their approximate locations.

- CAL FIRE, Butte FS and UHQ – located along the southern boundary of the Project site, potential contaminants of concern included gasoline and potential contamination of groundwater (uses other than drinking water). A Closure/No Further Action Letter was issued November 18, 2003.
- Butte CO Public Works Yard, Case 1 – located west and adjacent to the Project site, potential contaminants of concern included solvents and potential contamination of soil. A Closure/No Further Action Letter was issued December 11, 1993.
- Butte CO Public Works Yard, Case 2 – located west and adjacent to the Project site, potential contaminants of concern included gasoline and potential contamination of soil. A Closure/No Further Action Letter was issued December 13, 1993.
- Butte County Public Works Oroville Yard – located west and adjacent to the Project site, potential contaminants of concern included diesel and gasoline and potential contamination of soil. A Closure/No Further Action Letter was issued December 11, 1993; however the case was reopened October 9, 2008. The case is now officially closed as of October 10, 2008.

Although all these sites have been remediated and have been issued official Closure/No Further Action Letters, to ensure that the Proposed Project would not result in a significant hazard to the public, construction workers, and the environment, due to exposure to hazardous materials at this site, Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4 shall be implemented.

e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site is not located within an airport land use plan or within two miles of any public airport (City of Oroville 2009). The nearest airport is the Oroville Municipal Airport, located in the far western part of the City, approximately three miles southwest of the Project site (City of Oroville 2009; Google 2014). The Project would not result in a safety hazard for people residing and working in the Project area (City of Oroville 2009). Therefore, no impact would occur.

f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

There are no private airstrips in the vicinity of the Project area (City of Oroville 2009; Google 2014). No impact would occur.

g)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The Proposed Project is the demolition and replacement of the existing Butte FS and UHQ and is not anticipated to generate substantial long-term traffic and would not result in any permanent road closures or affect existing emergency shelters. The Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, this impact is considered less than significant.

h)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site is located on 4.36 acres and owned by CAL FIRE. All components of the Proposed Project would be built within the developed property, which is bound by Butte County-owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. (See Section 1.3 Surrounding Land Uses/Environmental Setting for a detailed discussion and *Representative Site Photographs*).

The Proposed Project consists of demolition and replacement of the existing Butte FS and UHQ, which maintains on-site fire suppression equipment, including firefighting personnel. There are no wildlands located adjacent to the Project site. No impact would occur.

4.9 Hydrology and Water Quality

4.9.1 Environmental Setting

Regional Hydrology

Butte County is located within the Sacramento River Hydrological Region. The Sacramento River Hydrological Region covers approximately 17 million acres ranging from the Modoc Plateau and Cascade Range to the Sacramento–San Joaquin Delta and includes the Sacramento River and its tributaries. Surface flows in this region are variable and partially dependent on snow melt (Butte County 2010). The Project site is located within the Lower Feather Watershed (Hydrologic Unit Code [HUC] # 18020124) (EPA 2014).

The Lower Feather Watershed is regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB). According to the State Water Resources Control Board's 2010 Integrated Report (Clean Water Act Section 303 (d) List/305 (d) Report) the nearest impaired water body to the Project site is Feather River, Lower (Lake Oroville Dam to Confluence with Sacramento River). The Feather River, Lower is impaired due to pesticides, mercury, and PCBs. Other impaired waters within the Lower Feather Watershed include Butte Slough, Jack Slough, Sacramento Slough, Sutter bypass, and Wadsworth Canal. Primary causes of impairment are pesticides and mercury (EPA 2014).

Climate

Butte County includes the geographic provinces of the Sacramento Valley and the foothill and mountain areas of the Sierra Nevada and Cascade ranges. The majority of precipitation occurs in the mountainous portions; however, the foothill areas do collect precipitation. Precipitation ranges from less than 20 inches of annual rainfall in the western valley area to more than 80 inches of annual rainfall in the eastern Cascade and Sierra Nevada mountains. The majority of precipitation occurs between November and February and falls as rain at 4,000 feet above mean sea level (msl) and below, and as snow above 4,000 feet above msl during the winter (Butte County 2010). As mentioned above, surface water flows are variable on a year-to-year basis. The northern Sacramento Valley experiences high annual variability consisting of wet years, dry years, and critically dry years occurring often (Butte County 2010).

Groundwater

The Project site is located within the East Butte Subbasin (Basin Number 5-21.59) of the Sacramento Valley Groundwater Basin (DWR 2004). Groundwater depths within the East Butte Subbasin average 15 feet during normal years and 30 to 40 feet during drought years and the estimated storage capacity is 3,128,959 acre-feet (DWR 2004). Groundwater use is limited in the area due to local reservoir storage of surface water (City of Oroville 2008).

Flooding

According to the Federal Emergency Management Agency National Flood Insurance Program, the Project site is not located within a 100-year flood zone. The Flood Insurance Rate Map (Panel Number 06007C0790E) shows the Project site located within Zone X, an area determined to be outside the 0.2 percent annual chance floodplain (FEMA 2011). Areas within the City of Oroville that are at risk to flooding include areas along the Feather River, Wyman Ravine area, and Cottonwood creek. The City of Oroville and Butte County are both responsible for drainage flows and providing flood protection within the City of Oroville (City of Oroville 2009).

Failure of the Oroville Dam, located northeast of the City of Oroville, could result in severe flooding in the City of Oroville, including the Project site. Dam failure would most likely be caused by a major seismic event. Seismic studies conducted for the Oroville Dam show that the dam could withstand a 6.5 magnitude earthquake without failure. A 6.5 magnitude earthquake is considered to be the largest event projected for the region (City of Oroville 2008).

Site Hydrology and On-Site Drainage

The majority of the Project site is paved, with small portions of lawn and landscaped areas. The general topography of the site slopes upward to the north from Nelson Avenue. Several retaining walls are located throughout the site due to the steep slope. Existing drainage systems on-site direct all storm water to run downhill off-site to Nelson Avenue. Storm water runoff is then collected by the existing City of Oroville's storm water drainage system. Currently, there are no storm water drainage problems on-site.

4.9.2 Regulatory Framework

State Water Resources Control Board

In 1972, the CWA was amended to prohibit discharge of pollutants to Waters of the U.S. from any point source unless it is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, further amendments to the CWA added Section 402(p), established a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On 16 November 1990, the EPA finalized regulations establishing storm water permit requirements for specific industries. These regulations provide that storm water discharges to Waters of the U.S. from construction projects with five or more acres of soil disturbance be prohibited unless the discharge is in compliance with an NPDES Permit. Further regulations (titled the Phase II Rule) which became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While EPA regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the California State Water Resources Control Board (SWRCB) has elected to adopt only one statewide General Permit that applies to the majority of storm water discharges associated with construction activities. On August 19, 1999, the State Water Board reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ). On December 8, 1999, the SWRCB amended Order 99-08-DWQ to apply to sites as small as one acre (SWRCB 2010).

The latest General Construction Permit (Order No. 2009-0009-DWQ), which the Proposed Project would comply with, was adopted on September 2, 2009. Order No. 2009-0009 DWQ created several new significant changes, including formal training requirements, online permitting/SWPPP documentation upload, minimum BMPs, Numeric Action Levels for pH and turbidity, as well as monitoring based on Project risk to sediment loss and threat to receiving waters (SWRCB 2010).

4.9.3 Hydrology and Water Quality (IX.) Environmental Checklist and Discussion

a)	Would the project violate any water quality standards or waste discharge requirements?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The majority of the precipitation for the area occurs during the winter months; however, adverse storm events can also occur outside of the winter. During construction of the Proposed Project, impacts to water resources could occur without proper controls to protect water quality and reduce impacts to soil erosion. Soil can be loosened during demolition, fill and grading, paving, and tree removal processes. Loosened soils and spills of fluids or fuels from construction vehicles and equipment or miscellaneous construction materials and debris could degrade surface and ground water quality. A heavy rainfall event could cause pollutants to flow off-site and reach nearby surface water drainages such as the Feather River. The Project site and area impacted would be greater than one acre (approximately 4.36 acres), making the Proposed Project subject to the requirements of the statewide NPDES storm water permit for construction (Order 98-08-DWQ). As stated in Section 2.6 Regulatory Requirements, Permits, and Approvals, a SWPPP listing BMPs to prevent construction pollutants and products from violating water quality standards or waste discharge requirements would be required for the Proposed Project.

All operational activities of the new Butte FS and UHQ are regulated to protect against water contamination. The vehicle wash rack includes a filtration system to filter water and the water is recycled for reuse within the system. Additionally, CAL FIRE would comply with all federal, state, and local regulations regarding the storage of hazardous waste. All storm water produced on-site would be directed to the existing storm water systems on Nelson Avenue maintained by the City of Oroville. A less than significant impact would occur.

b)	Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Domestic water for the Proposed Project would be provided by the TWSD. The new Butte FS and UHQ would install new water distribution systems that would connect to the existing water infrastructure in Nelson Avenue. As described in Section 4.17 Utilities and Service Systems, TWSD primary water source is surface water and groundwater is only used as a backup supply. As stated under Section 4.17.2 Utilities and Service Systems (XVII.) Environmental Checklist and Discussion item d), water demand would be similar to the existing facility and would not result in exceeding TWSD's current capacity (Edwards 2014).

Additionally, the Project site is currently developed and replacement of the Butte FS and UHQ would not increase the amount of impervious surfaces on-site and would not interfere with groundwater recharge. No impact would occur.

c)	Would the project 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- or off-site?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The Proposed Project would demolish the existing structures, retaining walls, and paving on-site. After demolition of the site, grading, paving and installation of new retaining walls would occur to accommodate the new Butte FS and UHQ. The topography of the Project site slopes upward north of Nelson Avenue and retaining walls would be required to prevent erosion on-site. The entire Project site would be paved except for small areas for lawns and landscaping surrounding buildings; however, the amount of impervious surfaces on-site would be similar to the existing Butte FS and UHQ.

Currently, storm water runoff is directed off-site to the existing storm water drainage systems maintained by the City of Oroville on Nelson Avenue, and there are no storm water runoff capacity

issues. The Proposed Project would replace the existing drainage systems on-site; however, storm water runoff would not increase and would not exceed the current drainage systems on Nelson Avenue. In addition, a SWPPP would be required and would provide BMPs required during construction to prevent erosion and siltation and also provide BMPs to be incorporated after Project completion to prevent future erosion and siltation. Implementation of proper temporary and long-term erosion and sediment control BMPs and installation of retaining walls would minimize potential erosion or siltation on or off-site both during and following construction. A less than significant impact would occur.

d)	Would the project 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- or off-site?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As mentioned in item c), the Proposed Project would not increase the amount of impervious surfaces on-site and would not alter current on-site drainage. The existing storm water drainage systems on-site would be replaced and all storm water runoff would be directed to the existing drainage systems on Nelson Avenue. In addition, implementation of temporary BMPs during construction and the long-term operational BMPs would prevent the increase of surface runoff from resulting in flooding on- or off-site. A less than significant impact would occur.

e)	Would the project create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As stated in items c) and d), the Proposed Project would not increase the amount impervious surfaces on-site and would not increase the amount of runoff from the Project site. Implementation of temporary BMPs during construction and the long-term operational BMPs would prevent the increase of surface runoff and would prevent erosion and sedimentation. In addition, all wastewater produced during operation of the vehicle wash rack would be recycled through a filtration system and water would be recycled for reuse. The Proposed Project would not exceed the capacity of the existing storm water drainage systems. A less than significant impact would occur.

f)	Would the project otherwise substantially degrade water quality?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Please see the answer to item a) in Section 4.8.2 Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion regarding potential hazardous substances used on-site. The

Proposed Project would follow all state and federal regulations regarding discharge of effluent and would not discharge any materials or substances that may degrade water quality into any water bodies. A less than significant impact would occur.

g)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in Section 4.9.1 Environmental Setting, the Proposed Project is not located within a 100-year flood hazard area (FEMA 2011). No impact would occur.

h)	Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in item g), the Proposed Project is not located within a 100-year flood hazard area (FEMA 2011). Therefore, no structures would impede or redirect flood flows. No impact would occur.

i)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As described in Section 4.9.1 Environmental Setting, failure of the Oroville Dam could result in severe flooding in the City of Oroville, including the Project site. However, seismic studies conducted for the dam concluded that the Oroville Dam could withstand a 6.5 magnitude earthquake, which is the highest magnitude projected for the region (City of Oroville). Thus, it is unlikely for a large enough seismic event to occur that would cause failure of the Oroville Dam. A less than significant impact would occur.

j)	Would the project be subject to inundation by seiche, tsunami, or mudflow?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project is located inland and not within a seiche, tsunami, or mudflow hazard area. Therefore, the Proposed Project would not be subject to inundation by seiche, tsunami, or mudflow. No impact would occur.

4.10 Land Use and Planning

4.10.1 Environmental Setting

The Project site is located in Butte County, California within the City of Oroville's jurisdiction. The Project site is designated Public/Quasi-Public by the Oroville General Plan and is zoned Public or Quasi-Public (PQ) by the City of Oroville Zoning Code (City of Oroville 2009; City of Oroville 2014). The Project site is located on 4.36 acres owned by CAL FIRE. All components of the Proposed Project would be built within the property, which is bound by Butte County-owned land consisting of residential homes (previously physician homes for the County Hospital) and a storage yard for the Butte County Fire Department on the north, the County of Butte government complex on the west across County Center Drive, the Home Depot and land under development for the Butte County Clerk-Recorder Complex on the south across Nelson Avenue, and residential homes and an apartment complex on the east across Del Oro Avenue. (Section 1.3 Surrounding Land Uses/Environmental Setting for a detailed discussion and Representative Site Photographs).

The State of California and State-owned land are not subject to local city or county land use and zoning regulations. However, the State is subject to the requirement under CEQA to assess project-related impacts that may occur as a result of conflicts between existing and proposed land uses. The Proposed Project was reviewed and determined to be consistent with the City of Oroville and Butte County's plans and policies (City of Oroville 2009; Butte County 2012).

4.10.2 Land Use and Planning (X.) Environmental Checklist and Discussion

a)	Would the project physically divide an established community?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The 4.36-acre Project site is currently developed and contains the existing Butte FS and UHQ owned and operated by CAL FIRE. The Proposed Project would include demolition of all buildings on-site except for two ECC buildings and the ECC tower located in the northeast corner of the Project site. As previously described in Section 4.10.1 Environmental Setting, the Project site is designated as Public/Quasi-Public by the Oroville General Plan and zoned as PQ. The surrounding land uses designations consist of residential, commercial and office, public or quasi-public, and vacant lands (City of Oroville 2009). The Proposed Project would occur entirely on CAL FIRE property, which is designated for public use. Therefore, the Proposed Project would not physically divide an established community. No impact would occur.

b)	Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As previously described in Section 4.10.1 Environmental Setting, the Proposed Project was reviewed and determined to be consistent with the City of Oroville and Butte County's plans and policies (City of Oroville 2009; Butte County 2012). As described in item a), the Proposed Project would occur entirely on CAL FIRE property. The Proposed Project would operate consistent with the currently existing FS and UHQ function to provide fire service to the surrounding community.

The Proposed Project would be consistent with the Public/Quasi-Public land use designation and PQ zoning designation and would not conflict with any applicable land use plan, policy, or regulation. No impact would occur.

c)	Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in Section 4.4 Biological Resources, Butte County is currently in the planning phase of BRCP, a joint HCP/NCCP that would establish an organized system for permitting and mitigating the incidental take of threatened and endangered species in the Planning area (BRCP 2011; CDFW 2014). The Proposed Project is located in the City of Oroville which is situated within an Urban Permit Area boundary (UPA) designated by the BRCP (BRCP 2012). The Proposed Project would be consistent with the existing land use and all development would remain within the UPA boundary. Therefore, the Proposed Project would not conflict with the BRCP. No impact would occur.

4.11 Mineral Resources

4.11.1 Environmental Setting

The Surface Mining and Reclamation Act of 1975 requires all cities and counties to incorporate the mapped mineral resource designations approved by the State Mining and Geology Board, in their General Plans. These designations categorize land as Mineral Resource Zones. To establish policies and programs for the conservation and development of mineral resources, the categories must be recognized by the local General Plan (City of Oroville 2009).

However, the mineral resources in Butte County have not been mapped by the State Geologist. Butte County's General Plan, Energy, Natural Resources and Recreation Element, has a policy that states the County Board of Supervisors shall formally request the California Department of Conservation, Division of Mines and Geology to map the mineral resources of Regional or Statewide significance in Butte County. The Oroville General Plan reiterates this policy (City of Oroville 2009).

According to the Oroville General Plan, "Sand and gravel, stone, and gold mining are the three primary mining industries in Butte County. Of these, the Butte County's Energy, Natural Resources and Recreation Element identifies only sand and gravel operations as present within the Oroville Planning Area. Despite its historical importance, gold mining has dwindled to a negligible level within the Planning Area." The City of Oroville is considered within the "gravel belt" of Butte County due to the sediment that washes down from the Sierra Nevada and settles in the slower moving waters of the Feather River. The gravels and sands deposited are mined and used in combination with Portland cement or asphalt compounds for construction and road building. All of the sand and gravel mining operations within the Planning Area are located south of the Oroville city limits, adjacent to or east of the Feather River (City of Oroville 2009).

4.11.2 Mineral Resources (XI.) Environmental Checklist and Discussion

a)	Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site and surrounding area has not been mined nor is it zoned for mining activity (City of Oroville 2009). No known mineral resources would be affected by the Proposed Project. Therefore, no impact would occur.

b)	Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project area is not located within a current locally-important mineral resource recovery site designated on a local general plan, specific plan or other land use plan, and there is no evidence of being historically mined (ECORP 2014b). No impact would occur.

4.12 Noise

4.12.1 Environmental Setting

A Noise Assessment was completed for the Proposed Project by j.c. brennan & associates (j.c. brennan 2014; Appendix H). The Noise Assessment evaluated the Proposed Project's potential to produce noise related impacts and the information provided in the assessment is summarized below.

Noise Background

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dBA. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment (j.c. brennan 2014).

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise

descriptor, Ldn, and shows very good correlation with community response to noise (j.c. brennan 2014).

The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. Table 7 lists several examples of maximum noise levels associated with common noise sources.

Table 7. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: j.c. brennan 2014

Effects of Noise on People

The effects of noise on people can be placed in three categories:

1. Subjective effects of annoyance, nuisance, and dissatisfaction,
2. Interference with activities such as speech, sleep, and learning, and
3. Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise—including stationary mobile sources such as idling vehicles—attenuate (lessen) at a rate of approximately 6 dBA per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate (j.c. brennan 2014).

Determination of a Significant Increase in Noise Levels

Table 8 is based upon recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been asserted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn} (j.c. brennan 2014).

Based upon the Table 8 criteria, an increase in the traffic noise level of 1.5 dB or more would be significant where the ambient noise level exceeds 65 dB Ldn. The rationale for the Table 8 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a Project is sufficient to cause significant annoyance (j.c. brennan 2014).

Table 8. Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, L_{dn}/CNEL	Increase Required for Significant Impact
<60 dBA	+5.0 dB or more
60-65 dBA	+3.0 dB or more
>65 dBA	+1.5 dB or more

Source: j.c. brennan 2014

Existing Noise Environment

The existing noise environment in the vicinity of the Project is typical of a suburban neighborhood with traffic noise as the primary source of ambient noise, especially during daytime hours. Nighttime ambient noise levels are fairly low due to low nighttime traffic volumes (j.c. brennan 2014). The primary noise source in the vicinity of the Proposed Project is roadway traffic on Nelson Avenue, and activities associated with the existing Butte FS and UHQ. The primary noise source from the Fire Station included dispatch chatter on exterior public address speakers and vehicle movements on the Project site (j.c. brennan 2014).

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the Project vicinity continuous noise level measurements were conducted in the Project vicinity on April 2 and 3, 2014 (j.c. brennan 2014). Two noise measurements were taken; east of the Project site in the undeveloped field at the corner of Del Oro and Nelson Avenue and along the center of the northern Project boundary. The noise level measurement survey results are provided in Table 9.

Table 9. Summary of Existing Background Noise Measurement Data

Site	Location	Ldn	Average Measured Hourly Noise Levels, dB					
			Daytime (7am-10pm)			Nighttime (10pm-7am)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous (24-hour) Noise Level Measurements								
LT-1	Traffic on Nelson Avenue	61	61	56	79	52	43	69
LT-2	Chatter from CAL FIRE Speaker/Dispatch, background traffic noise, activities at Butte FS and UHQ	57	58	47	70	45	42	57

Source: j.c. brennan 2014

The sound level meters were programmed to collect hourly noise level intervals during the survey (j.c. brennan 2014). The maximum value (Lmax) represents the highest noise level measured during an interval. The average value (Leq) represents the energy average of all of the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval (j.c. brennan 2014).

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4) (j.c. brennan 2014).

4.12.2 Regulatory Background

County General Plan Noise Element

The General Plan Noise Element establishes objectives and implementing policies intended to limit community exposure to excessive noise levels (see Appendix F for further discussion of Noise/land use compatibility standards). The General Plan Noise Element establishes the following goals, objectives, and policies associated with noise that are applicable to the Proposed Project. Please note that all tables referenced in the Polices listed below are provided in Appendix H.

Goal NOI-1: *Minimize community exposure to excessive noise by ensuring compatible land uses relative to noise sources.*

Policies

P1.1: Include noise considerations in land use planning, transportation planning and project design decisions.

P1.2: Require new development to mitigate exterior noise to the noise exposure levels (Appendix F, Table 3 and Table 4) in the backyards of single-family homes and in outdoor common use areas in multi-family residential facilities.

P1.3: Require preparation of a noise analysis/acoustical study, which is to include recommendations for mitigation, for all proposed projects which may result in potentially significant noise impacts to nearby noise sensitive land uses, such as residences or that is predicted to be exposed to noise levels greater than the exterior or interior noise levels (Appendix F, Table 3 and Table 4).

The following provisions would apply to project-specific acoustical analyses:

- Be the financial responsibility of the applicant.
- Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures that require the construction of noise barriers or structural modifications to buildings that may be considered to contain noise-sensitive land uses.
- Estimate noise exposure after the prescribed mitigation measures have been implemented.
- Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.

P1.4: Require an acoustical analysis and include appropriate mitigation measures in the project design where the land uses (Appendix F, Table 3) are proposed in areas exposed to existing or projected exterior transportation noise levels exceeding the levels specified (Appendix F, Table 3).

P1.5: Mitigate noise created by proposed non-transportation noise sources so as not to exceed the noise level standards (Appendix F, Table 4) as measured immediately within the property line of the affected land use.

P1.6: Require mitigation of all significant noise impacts as a condition of project approval. Use the following thresholds in making a determination of significant impact pursuant to the California Environmental Quality Act (CEQA):

- The significance of noise impacts may be determined by comparison of overall noise levels (including contributions from the project) to applicable federal, State or local noise level standards, and by the expected change in ambient noise levels which will occur as a result of the project.
- The overall noise level may be considered significant if the project results in the exposure of noise sensitive land uses to noise levels which exceed the noise standards (Appendix F, Table 4).
- An increase of 3 dB will be considered a significant increase in the ambient noise level.
- For transportation noise sources in the City of Oroville the increases in noise specified (Appendix F, Table 5) represent a significant increase in ambient noise.

P1.7: Only allow land uses to exceed the noise exposure standards (Appendix F, Table 3 and Table 4) if the proposed use can be shown to serve the greater public interests of the citizens of Oroville.

P1.8: Discourage the construction of sound walls. Instead, use building set-backs, earthen berms, alternative architectural layouts and other means to meet the land use compatibility requirements specified (Appendix F, Table 3 and Table 4).

P1.11: Reduce potential impacts from groundborne vibration associated with rail operations by requiring that vibration sensitive buildings (e.g., residences) are sited at least 100 feet from the centerline of the railroad tracks whenever feasible and that development of vibration- sensitive buildings within 100 feet from the centerline of the railroad tracks require a study demonstrating that groundborne vibration issues associated with rail operations have been adequately addressed (i.e., through building siting or construction techniques).

Noise Source Reduction

Goal NOI-2: *Reduce noise levels from sources such as domestic uses, construction, and mobile sources including motor vehicles and aircraft.*

Policies

P2.1: Mitigate noise created by new transportation noise sources, including roadway improvement projects, so as not to exceed the levels specified (Appendix F, Table 3) at outdoor activity areas or interior spaces of the existing uses specified in Table NOI-4.

P2.2: Enforce provisions of the Community Noise Ordinance, which limits maximum permitted noise levels that cross property lines and impact adjacent land uses.

P2.3: Limit noise generating construction activities located within 1,000 feet of residential uses to daytime hours between 7:00 a.m. and 6:00 p.m. on weekdays and non-holidays.

P2.4: Require the following standard construction noise control measures to be included as requirements at construction sites in order to minimize construction noise impacts:

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.
- Utilize "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists and is feasible.
- The project sponsor shall designate a "noise coordinator" who would be responsible for responding to any local complaints about construction noise. The noise coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler) and will require that reasonable measures warranted to correct the problem be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site. Additionally, the project sponsor shall send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints.

P2.6: Support efforts to reduce vehicle and equipment noise, e.g. through fleet and equipment modernization or retrofits, use of alternative fuel vehicles and installation of mufflers or other noise reducing equipment.

City of Oroville Noise Ordinance

The City of Oroville Municipal Code, Chapter 13A, Noise, also known as the Noise Ordinance of the City of Oroville is a follows:

13A-3 Residential property noise limits.

(a) No person shall produce, suffer or allow to be produced by any machine, animal or device, or any combination of same, on residential property, a noise level more than five dB above the local ambient at any point outside of the property plane.

(b) No person shall produce, suffer or allow to be produced by any machine, animal, or device, or any combination of same, on multifamily residential property, a noise level more than five dB above the local ambient three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, when the windows and doors of the dwelling unit are closed, except within the dwelling unit in which the noise source or sources may be located (Ord. No. 1380, Sec. 3).

13A-4 Commercial and industrial property noise limits.

No person shall produce, suffer or allow to be produced by any machine or device, or any combination of same, on commercial or industrial property, a noise level more than eight dB above the local ambient at any point outside of the property plane (Ord. No. 1380, Sec. 4).

13A-5 Public property noise limits.

(a) No person shall produce, suffer or allow to be produced by any machine or device, or any combination of same, on public property, a noise level more than fifteen dB above the local ambient at a distance of twenty-five feet or more from the source unless otherwise provided in this chapter.

(b) Sound performances and special events not exceeding eighty dBA measured at a distance of fifty feet from the source are exempt from this chapter when approval therefore has been obtained from the city.

(c) Vehicle horns, or other devices primarily intended to create a loud noise for warning purposes, shall not be used when the vehicle is at rest, or when a situation endangering life, health, or property is not imminent (Ord. No. 1380, Sec. 5).

13A-6 Exceptions--Designated.

(a) Daytime Exceptions. Any noise source which does not produce a noise level exceeding seventy dBA at a distance of twenty-five feet from the source under its most noisy condition of use shall be exempt from the provisions of sections 13A-3, 13A-4 and 13A-5 between the hours of seven a.m. and nine p.m. daily except Saturdays, Sundays and holidays, when the exemption herein shall apply between ten a.m. and six p.m.

(b) Safety Devices. Aural warning devices which are required by law to protect the health, safety, and welfare of the community shall not produce a noise level more than three dB above the standard or minimum level as provided by state law.

(c) Construction and Alteration of Structures. Notwithstanding any other provision of this chapter, between the hours of seven a.m. and nine p.m. daily except Saturdays, Sundays and holidays, when the exemption herein shall apply between ten a.m. and six p.m., construction, alteration or repair of structures shall be allowed if it meets at least one of the following noise limitations:

(1) No individual piece of equipment shall produce a noise level exceeding eighty-three dBA at a distance of twenty-five feet from the source. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to twenty-five feet from the equipment as possible;

(2) The noise level at any point outside of the property plane of the project shall not exceed eighty-six dBA;

(3) The provisions of subdivisions (1) and (2) of this subsection shall not be applicable to impact tools and equipment, provided that on and after a date six months after the effective date of this chapter, such

impact tools and equipment shall have intake and exhaust mufflers recommended by the manufacturers thereof and approved by the city's director of public works as best accomplishing maximum noise attenuation, and that pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the city's director of public works as best accomplishing maximum noise attenuation. In the absence of manufacturer's recommendations, the director of public works may prescribe such means of accomplishing maximum noise attenuation as he may determine to be in the public interest.

(d) Emergencies and Emergency Vehicles. Emergencies and emergency vehicles are exempt from the provisions of this chapter.

(e) Power Tools. The operation of power tools for noncommercial purposes shall be exempt from the provisions of sections 13A-3, 13A-4 and 13A-5 between the hours of nine a.m. and eight p.m.; provided, that such operations shall be subject to the provisions of section 13A-8. For the purpose of this subsection, a noncommercial use shall be any use for which a business license is not required pursuant to Chapter 12 of this Code (Ord. No. 1380, Sec. 6).

13A-8 Loud and unusual noises prohibited.

Consistent with other provisions of this chapter, and in addition thereto, it shall be unlawful for any person to willfully make, produce, suffer or allow to be produced by any machine, animal or device, or any combination of same, any loud, unnecessary, or unusual noise which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area (Ord. No. 1380, Sec. 10).

Vibration Standards

The City of Oroville does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with project implementation (j.c. brennan 2014).

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. The threshold for damage to structures ranges from 2 to 6 peak particle velocity in inches per second (in/sec ppv). One-half this minimum threshold or 1 in/sec ppv is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec ppv (j.c. brennan 2014).

4.12.3 Noise (XII.) Environmental Checklist and Discussion

a)	Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

During the construction phases of the Proposed Project, noise from construction activities would add to the noise environment in the immediate Project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table 10, ranging from 78 to 85 dBA at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours (j.c. brennan 2014).

Table 10. Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compactor	83
Compactor	80
Dozer	82
Dump Truck	76
Excavator	81
Paver	85
Grader	85
Roller	80
Trencher	81

Source: j.c. brennan 2014

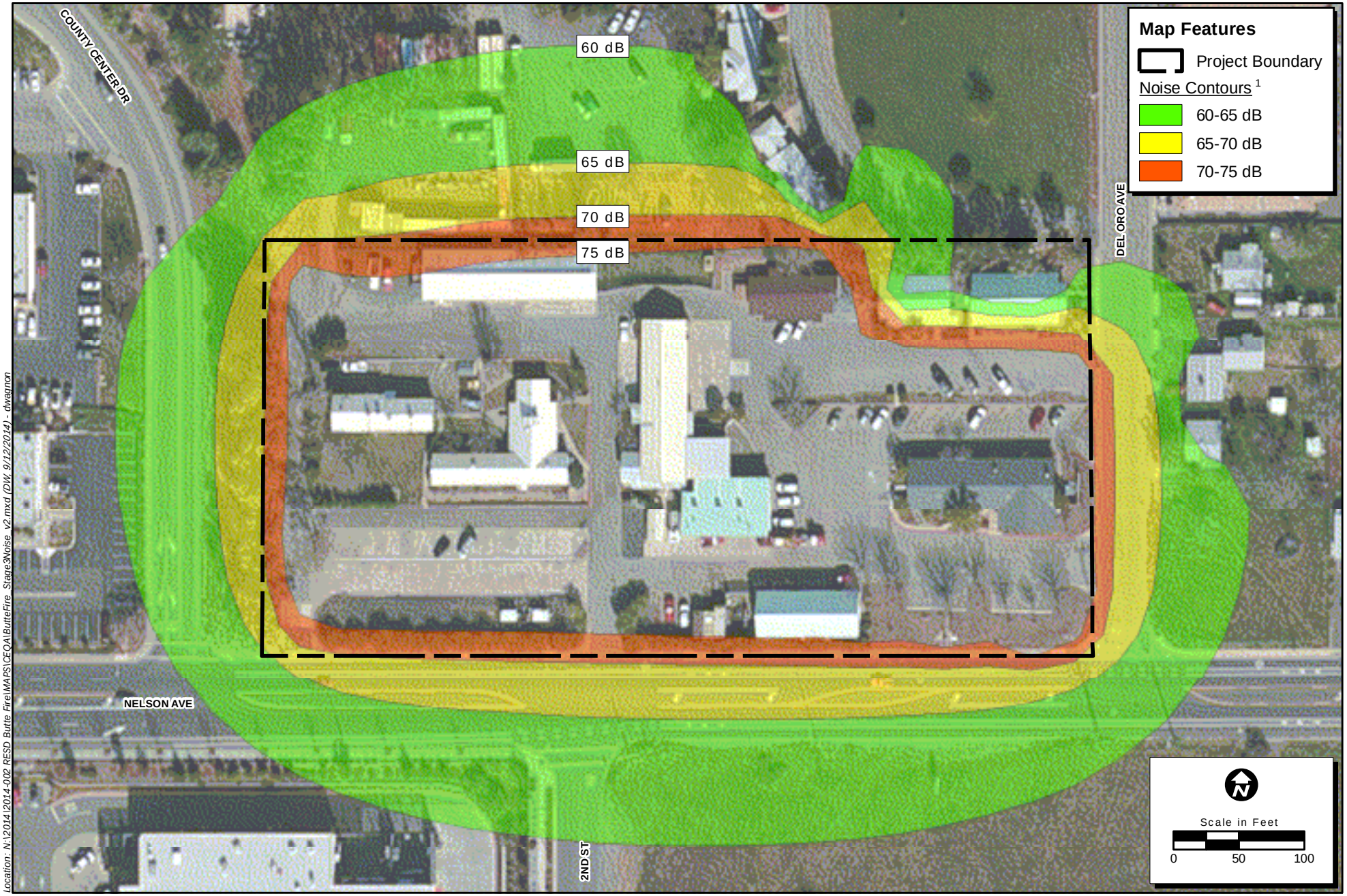
Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant Project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours (j.c. brennan 2014). The Federal Highway Administration Construction Noise Model was used to determine the construction noise impacts for the Proposed Project. Based upon the results of the Construction Noise Model, the predicted overall noise levels are shown in Table 11 (j.c. brennan 2014).

Table 11. Predicted Construction Noise Levels (Worst-Case Period)

Phase	Equipment List	Estimated Hourly Sound Levels @ 50 feet L_{eq} / L_{max} (dBA)
Stage 3: Site Preparation / Grading Phase	Excavators (1) Back hoes (2) Riding compactors (2) Hand held portable compactors (2) Grader (1) Dump truck (1) Water truck (1)	Total: 86.2 dBA L_{eq} - 85.0 dBA L_{max}
Stage 4: Construction of Structures Phase	15-foot lifts (2) 20-ton crane (1) Fork lift (1) Water truck (1)	Total: 80. 6dBA L_{eq} – 77.1 dBA L_{max}

Source: j.c. brennan 2014

Figures 6 and 7 show the construction noise contours for Stage 3 and Stage 4, respectively. The construction noise contours were developed using the CadnaA noise prediction model with direct inputs from the FHWA Construction Noise Model. The CadnaA model can develop noise contours while accounting for topography, intervening buildings, multiple noise sources and ground type (j.c. brennan 2014).



Location: N:\2014\2014-002 RESD Butte Fire\MAPS\CEQA\ButteFire_Stage3Noise_v2.mxd (DW, 9/12/2014) - dwagnon

Map Date: 9/12/2014
Photo Source: ESRI USA Imagery (Accessed 9/12/2014)
[1] Source: j.c. brennan and associates

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Figure 6. Stage 3 Construction Noise Contours

2014-002 RESD Butte Fire

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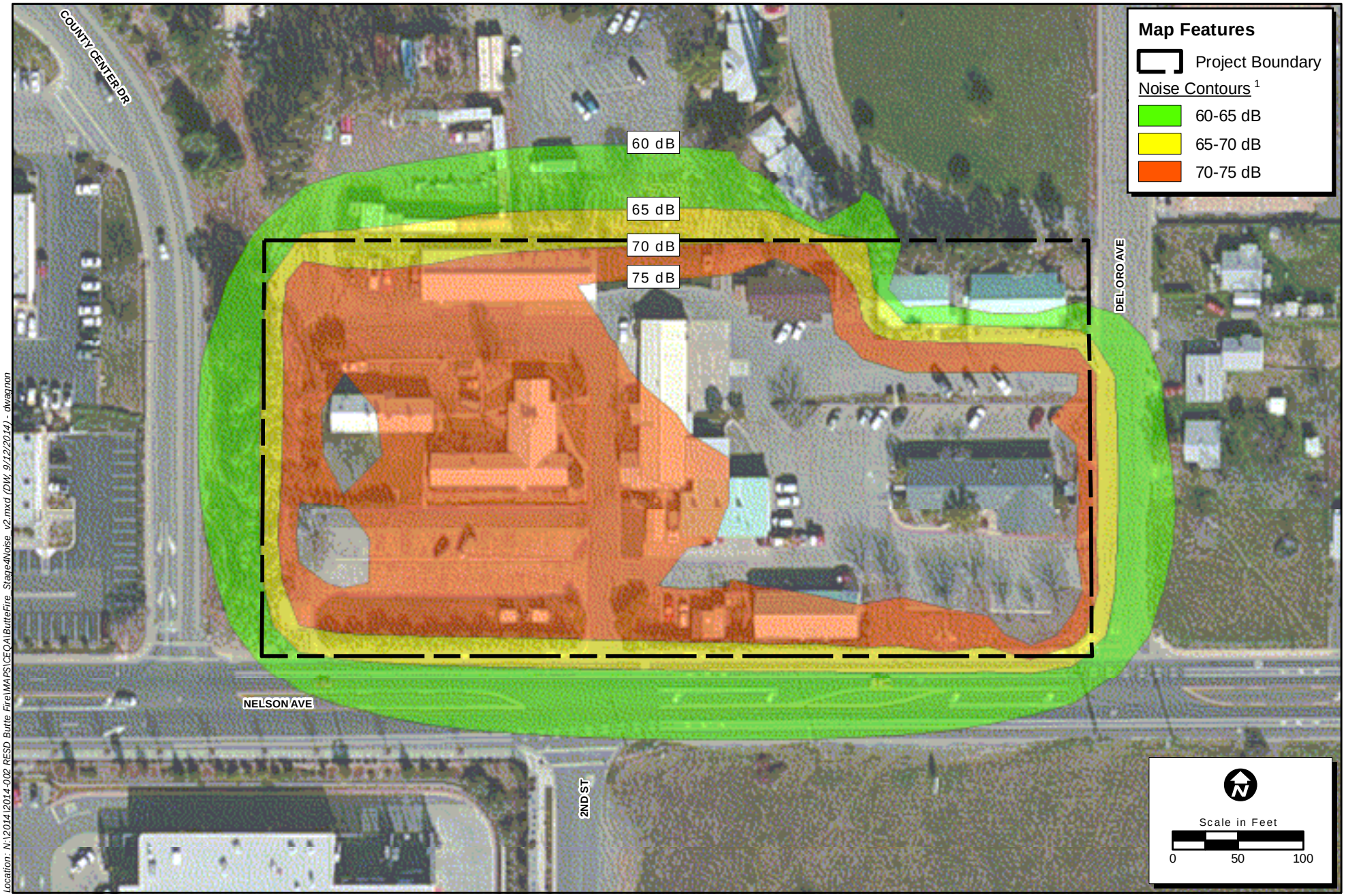

Location: N:\2014\2014-002 RESD Butte Fire\MAPS\CEQA\ButteFire_Stage4Noise_v2.mxd (DW, 9/12/2014) - dwagnon

Map Date: 9/12/2014
Photo Source: ESRI USA Imagery (Accessed 9/12/2014)
[1] Source: j.c. brennan and associates

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Figure 7. Stage 4 Construction Noise Contours

2014-002 RESD Butte Fire

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The State of California and State-owned land are not subject to local city policies or ordinances. However, the State is subject to the requirement under CEQA to assess project-related impacts that may occur as a result of project implementation and exceedance of noise standards identified by these policies or ordinances. Based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to these sensitive receptors. To ensure that the Project construction adheres to the requirements of the City of Oroville General Plan and City of Oroville Noise Ordinance, the Mitigation Measure N-1 shall be implemented to reduce construction noise to a less than significant level.

Mitigation Measure

N-1 Construction Noise Limits

A. Limit construction to between the hours of 7:00 a.m. and 6:00 p.m. on weekdays;

B. Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

C. Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

D. Utilize "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists and is feasible.

E. The Contractor shall designate a "noise coordinator" who would be responsible for responding to any local complaints about construction noise. The noise coordinator would determine the cause of the noise complaint (e.g. starting too early, bad muffler) and would require that reasonable measures warranted to correct the problem be implemented. The Contractor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the Project site. Additionally, the Project sponsor shall send a notice to neighbors in the Project vicinity with information on the construction schedule and the telephone number for noise complaints.

F. One of the following construction noise limitations shall be met:

1. No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible;

2. The noise level at any point outside of the property plane of the Project shall not exceed 86 dBA.

b)	Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As described in Section 4.12.1 Environmental Setting, human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Vibration criteria developed by Caltrans indicate that the threshold for damage to structures ranges from 2 to 6 in/sec. One-half this minimum threshold or 1 in/sec ppv is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec ppv (j.c. brennan 2014). Table 12 describes the vibration levels for varying construction equipment that would be used during construction.

Table 12. Typical Construction Equipment Vibration Levels

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 50 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026

Source: j.c. brennan 2014

The Table 12 data indicate that construction vibration levels anticipated for the project are less than the 0.1 in/sec criteria at distances of 26 feet. Substantial project construction activity (grading, vibratory compactor) is not predicted to occur within 26 feet of any existing sensitive structures (j.c. brennan 2014).

Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a less than significant impact.

c)	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

The primary noise-generating components of the Proposed Project are expected to include auto shop operations, vehicle wash rack, and backup generator. Other operational noise, such as sirens from fire trucks, would be similar to the existing conditions and would not change at the new Butte FS and UHQ.

Auto Shop Noise Levels

Typical noise sources associated with the new auto shop will include pneumatic air wrenches, compressors, impact tools, grinders, and panel cutters. As a means of evaluating noise levels associated with the new auto shop, j.c. brennan & associates, Inc. utilized noise measurement data collected at an existing auto shop in Grass Valley, California (j.c. brennan 2014; Appendix F). The noise measurements were conducted at a distance of 20 feet from the bays. The center of the proposed auto shop bays would be located approximately 135 feet from the nearest residential

property line to the northeast. The predicted auto shop noise levels are shown in Table 13, accounting for the increased distances to the adjacent residential property line (j.c. brennan 2014).

Wash Rack Noise Levels

Noise levels for the wash rack were collected at an auto shop in Sacramento, California and included the use of a high pressure spray rig. The noise level measurements were conducted at a distance of 75 feet. The center of the proposed wash rack would be located approximately 240 feet from the nearest residential property line to the northeast. The predicted wash rack noise levels are shown in Table 13, accounting for the increased distances to the adjacent residential property line (j.c. brennan 2014).

Table 13. Predicted Auto Shop and Wash Rack Noise Levels

Type of Equipment	Measured Noise Level	Predicted Maximum Noise Level at Property Line	Typical Hourly Use	Predicted L_{eq} at the Property Line [1]
Compressor	53 dBA at 20'	31 dBA L_{max}	5 minutes	18 dBA L_{eq}
Impact Tools	54 dBA at 20'	32 dBA L_{max}	10 minutes	22 dBA L_{eq}
Panel Cutter	62 dBA at 20'	40 dBA L_{max}	5-10 minutes	30 dBA L_{eq}
Grinder	55 dBA at 20'	33 dBA L_{max}	5-10 minutes	23 dBA L_{eq}
Wash Rack	70 dBA L_{max} at 75' 62dB L_{eq} at 75'	55 dBA L_{max}	30-60 minutes	47 dBA L_{eq}
			Cumulative Hourly L_{eq}	47 dBA L_{eq}

Notes: [1] Predicted noise levels include a-5 dB offset to account for shielding from intervening buildings.
Source: j.c. brennan 2014

Based upon the Table 13 data, Project-related noise levels are predicted to be 47 dBA Leq at the nearest residential property line (j.c. brennan 2014). The City of Oroville establishes a daytime (7:00 am. to 10:00 pm) noise level standard of 50 dBA Leq. Therefore, no additional noise control measures would be required. A less than significant impact would occur.

Backup Generator Noise Levels

The generator/storage building would be approximately 534 square feet and would be located east of the maintenance/support building. The building would store two parallel 150 kilowatt (KW) propane emergency power generators (120/208 Volts (V), 3-phase) set up as a 300 KW emergency back-up source (j.c. brennan 2014).

Specific sound level data for these generators is not currently available. However, based upon manufacturer's data for a similar 150 KW generator, noise levels for a single unit are estimated to be 90 dBA at a distance of seven meters (23 feet) at full rated load. The total noise level for both units would be 93 dBA at seven meters (23 feet) (j.c. brennan 2014). The center of the proposed generator building would be located approximately 25 feet from the nearest property to the north, which is zoned for residential uses. The predicted noise levels of 93 dBA would exceed the City of Oroville daytime noise level standard of 50 dBA L_{eq} and nighttime standard of 45 dBA L_{eq}. However, the City of Oroville General Plan allows for an exemption from their normal noise level standards where the proposed use can be shown to serve the greater public interest of the citizens of Oroville (j.c. brennan 2014). In this case, operation of the emergency generators would allow the fire station to remain operational under a period of extended power outage. This is clearly in the interest of the citizens of Oroville and the City's General Plan noise level standards would likely not apply (j.c. brennan 2014).

Additionally, the City's Noise Ordinance Section 13A-6(d) exempts noise from emergencies and emergency vehicles. Extended operation of the proposed backup generators would only occur under emergency conditions. Therefore, noise associated with emergency generator operation would likely be exempt from regulation (j.c. brennan 2014).

Backup generators typically require monthly or even weekly exercising to ensure that they remain operational in case of an emergency power outage. This exercising would typically occur during daytime hours. Under these conditions, the generators would not be operating under emergency conditions and may likely fall under the regulation of the City's Noise Ordinance. Noise Ordinance, Section 13A06(a), provides an exemption for daytime noise regulation, assuming that the noise level is less than 70 dBA at a distance of 25 feet from the noise source (j.c. brennan 2014).

The above-listed noise levels assume a standard weather-protective cover and do not account for the generators being located within a structure. The proposed generator building would consist of concrete masonry unit (CMU) type construction. However, ventilation openings required for operation of the generators (e.g., cooling air, combustion air, engine exhaust) would be a primary path for noise to escape the building (j.c. brennan 2014). Therefore, these paths would require acoustic treatment to reduce exterior noise levels from the backup generators. Such treatments would likely include the use of silencers or acoustical louvers, in addition to upgraded engine mufflers. At this time there is not enough information available on the proposed backup generators to design these noise control measures. Therefore, specific noise control measures would need to be specified at a later time. The specified noise control measures would be designed to achieve a noise level of 70 dBA, or less, at a distance of 25 feet from the proposed generator building.

To ensure compliance with a noise level standard of 70 dBA at a distance of 25 feet from the generator building, Mitigation Measure N-2 shall be implemented to reduce impacts to a less than significant level.

Mitigation Measure

N-2 Operational Noise Limits

A. The proposed backup generator building shall be designed to achieve a noise level of 70 dBA, or less, at a distance of 25 feet from the proposed generator building. The design shall be reviewed by a qualified acoustic engineer to verify that sufficient noise control measures have been implemented into the project design to verify this requirement. It is anticipated that meeting this requirement would likely require the use of silencers or acoustical louvers, in addition to upgraded engine mufflers.

d)	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Construction of the Proposed Project would result in a temporary increase in ambient noise levels in the Project vicinity. However, as discussed under item a), construction would be temporary and only occur during daytime hours. Additionally, the implementation of Mitigation Measure N-1 would reduce impacts associated with a temporary increase in ambient noise levels to be less than significant. A less than significant impact would occur.

e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site is not located within an airport land use plan or within two miles of a public airport (City of Oroville 2009; j.c. brennan 2014). The nearest airport is the Oroville Municipal Airport, located in the far western part of the City, approximately three miles southwest of the Project site (City of Oroville 2009; Google 2014). The Proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in Section 4.8 Hazardous and Hazardous Materials (VIII) Environmental Checklist and Discussion item f), there are no private airstrips in the vicinity of the Project area (City of Oroville 2009; City of Oroville 2010). The Proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

4.13 Population and Housing

4.13.1 Environmental Setting

The Proposed Project is located at the Butte FS and UHQ in the City of Oroville, Butte County, California. According to the U.S. Census Bureau, the City of Oroville had a total population of approximately 16,061 people in 2013 and an estimated 73.2 percent of people living in the same house one year and longer from 2008 to 2012 (U.S. Census Bureau 2014a). The Proposed Project is located within Butte County Census Tract 25 which has an estimated total population of approximately 5,339 people in 2012. In 2010, there were a total of 1,490 housing units, 1,490 of which were occupied within Census Tract 25 (U.S. Census Bureau 2014b).

As described in Section 2.1 Project Background, the Butte FS and UHQ operates year-round, with six months out of the year operating at a higher capacity (summer staffing). There is a maximum of 15 firefighters on-site during summer staffing (May 1st through November 1st), with a maximum of 13 firefighters “hot bunking” (multiple staff sleeping in shifts in the same bed) in the barracks. There are usually four firefighters on-site during the rest of the year. In addition to the firefighters, the auto shop staffs three maintenance employees and there are 23 administrative staff employees working in the administrative building year-round. See Section 2.1 Project Background for a list of the number and employees and their titles.

Operations of the new Butte FS would be similar to the existing operations and employee positions with the exception of the new administration building staffing an additional three to five employees, resulting in a total of 26-28 employees. In addition, the maximum capacity of the barracks would

increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary.

Population and Housing (XIII.) Environmental Checklist and Discussion

a)	Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The existing operations and employee positions would remain the same as those described in Section 2.1 Project Background with the exception of the administration building which would staff an additional three to five employees and the maximum capacity of the barracks would increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary. Overall, increases in employees would be minimal and there would be no need for additional housing with implementation of the Proposed Project. In addition, the Proposed Project does not involve the extension of roads or other infrastructure that would directly or indirectly induce population growth. No impact would occur.

b)	Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As previously described in item a), the Proposed Project would replace all facilities associated with the Butte FS and UHQ, currently located at the Project site, with the exception of the ECC buildings and ECC tower. The Proposed Project would be located at the existing Butte FS and UHQ within CAL FIRE's property boundary. The Project site would not extend beyond the property boundary and would not displace any existing housing. No impact would occur.

c)	Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As previously described in item a), CAL FIRE would operate out of the existing Butte County Fire Department Facilities located throughout Butte County during demolition and construction of the replacement Butte FS. If necessary, CAL FIRE would rent office space, auto shop space, and warehouse space to accommodate operational and storage needs. This would be temporary and would occur only for the duration of construction. Construction of replacement housing would not be necessary. Once constructed, operation of the Butte FS and UHQ would resume at the Project site. Implementation of the Proposed Project would not displace any people that would necessitate the construction of replacement housing elsewhere. No impact would occur.

4.14 Public Services

4.14.1 Environmental Setting

Police Services

Police services for the City are provided by the Oroville Police Department (OPD). OPD is located at 2055 Lincoln Street, Oroville, California 95965, approximately 1.45 miles northwest of the Project site. The OPD provides service to a 13-square-mile service area, including all areas within the City limits. The OPD operates with 21 full-time sworn personnel, including a K-9 officer, 14 full-time non-sworn personnel, three part-time sworn personnel, two part-time non-sworn personnel, and three volunteer positions (City of Oroville 2009). The unincorporated areas outside of the City limits are within the jurisdiction of the Butte County Sheriff's Office. The Butte County Sheriff's Office is located approximately 0.45 mile northwest of the Project site. There is no mutual aid agreement between the Butte County Sherriff and OPD, although they do work together on occasion. Generally, the two agencies do not service each other's jurisdictions (City of Oroville 2009).

In addition to police services, as described in Section 2.4.2 New Facility Operations and Maintenance, the Proposed Project would operate similar to the existing operations and would provide its own security through the presence of on-site personnel 24 hours a day.

Fire Services

The Proposed Project is located at the Butte FS and UHQ operated by CAL FIRE. As described in Section 2.1 Project Background, The Butte Unit acts dually as the Butte County Fire Department and serves all unincorporated areas of Butte County, the City of Biggs, and the City of Gridley. In addition, the Butte Unit serves the City of Oroville, the City of Chico, and the town of Paradise through a mutual aid agreement (Butte County 2013).The Butte FS operates 24 hours a day, seven (7) days a week, year round with six months out of the year operating at a higher capacity (summer staffing). There are 15 firefighters on-site during summer staffing (May 1st through November 1st), with a maximum of eight firefighters "hot bunking" (multiple staff sleeping in shifts in the same bed) in the barracks. There are usually four firefighters on-site during the rest of the year. Three fire engines and one bulldozer operate 24-hour response and the station averages over 1,500 emergency responses per year (see Section 2.1 Project Background for further details).

As described in Section 2.4.1 Construction Period Operations and Maintenance, CAL FIRE would operate out of the existing Butte County Fire Department Facilities located throughout Butte County during demolition and construction of the replacement Butte FS. Those facilities include the Oroville Fire Department located approximately 1.45 miles southeast, El Medio Fire Department located approximately 2.2 miles southeast, and Kelly Ridge Fire Station located approximately 4.5 miles from the Project site (City of Oroville 2009; Google 2014).

Schools

There are five school districts serving elementary and high school students within the City of Oroville's planning area which include Oroville City Elementary School District, the Oroville Union High School District (OUHSD), Palermo Union School District, Thermalito Union School District, and Biggs Unified School District (City of Oroville 2009). Several public and private schools are located within one mile of the Project site. Prospect High School/OUHSD Community Day School is located approximately 0.25 mile south, Mesa Vista School and Nelson Middle School located approximately 0.50 mile west, Plumas Avenue School is located approximately 0.45 mile southwest, and Saint

Thomas Catholic School and Bird Street School located approximately one mile southeast of the Project site (City of Oroville 2009; Google 2014).

Parks

There are City-owned parks and recreation facilities distributed consistently throughout the City of Oroville's planning area, as well as recreational open space, regional, and State parks (City of Oroville 2009; Google 2014). These parks provide recreational opportunities for residents including fishing, hiking, river-rafting, and access to sports fields and the Downtown Skate Park (City of Oroville 2009). Parks within approximately one mile of the Project site include Hammon Park located approximately 0.25 mile south, Nelson Park located approximately 0.50 mile northwest, Bedrock Park located approximately 0.80 mile south, Rotary Park located approximately 0.85 mile southeast; Bedrock Skate and Bike Park located approximately 0.93 mile south, and Lott-Sank Park located approximately one mile south.

Additional parks and recreational facilities are discussed in Section 4.15 Recreation, Section 4.15.1 Environmental Setting.

Other Public Facilities

There are several other public facilities located in proximity to the Project site. As discussed in Section 1.3 Surrounding Land Uses/Environmental Setting, the Project site is bound by the County of Butte government complex on the west across County Center Drive and land currently under development for the Butte County Clerk-Recorder Complex (aka Hall of Records) on the south across Nelson Avenue. Other public facilities within the vicinity of the Project as shown in Figure 2. *Project Location*, include the UC Cooperative Extension Butte County located approximately 0.10 mile northeast, Butte County Government Complex located approximately 0.15 mile north, and the Butte County Cemetery approximately 0.25 mile northwest.

4.14.2 (XIV.) Environmental Checklist and Discussion

a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: • Fire Protection? • Police Protection? • Schools? • Parks? • Other Public Facilities?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Fire Protection

The Proposed Project would not require additional fire protection within the City of Oroville. The Proposed Project consists of demolition and replacement of the existing Butte County FS and UHQ. As referenced above in Section 4.14.1 Environmental Setting, CAL FIRE would operate out of the existing Butte County Fire Department Facilities located throughout Butte County during demolition and construction of the replacement Butte FS. Construction of the Proposed Project would not impact fire service for the City of Oroville. No impact would occur. After construction, a beneficial impact is anticipated.

Police Protection

The Proposed Project would operate with CAL FIRE personnel on-site 24 hours a day, seven (7) days a week. The Proposed Project would have similar operational requirements as the existing facility and would not increase the need for police services within the City of Oroville. No impact would occur.

Schools

The Proposed Project includes the demolition and replacement of the existing Butte FS and UHQ and does not require an expansion of residential housing. The Proposed Project would not induce population growth and require an additional need for school facilities. No impact would occur.

Parks

As described above, the Proposed Project does not require an expansion of residential housing and would not induce population growth. The Proposed Project would not displace an existing park and would not require the construction of additional park facilities. No impact would occur.

Other Public Facilities

As described above, the Proposed Project does not require an expansion of residential housing and would not induce population growth. The Proposed Project would not increase use of existing public facilities in the area because it would not promote an increase in population. No impact would occur.

4.15 Recreation

4.15.1 Environmental Setting

The City of Oroville has many recreational sites throughout its planning area including recreational open space, regional and State parks, and City parks and other recreation facilities. State agencies manage large tracts of land within the Lake Oroville State Recreation Area which includes Lake Oroville reservoir and Oroville Dam. Approximately 2,750 acres of the 12,000-acre Oroville Wildlife Refuge, a riparian forest, is located within the City of Oroville planning area and provides recreational opportunities for hiking, bird watching, canoeing, fishing and seasonal hunting (City of Oroville 2009). In addition, regional and State parks managed through a collaborated effort between the City of Oroville Department of Parks and Trees, Feather River Recreation and Park District (FRRPD), and the California Department of Parks and Recreation offer further recreational opportunities. The most prominent parks include River Bend Park located on the Feather River, Mitchell Park located south of downtown, and Nelson Park and Recreation Center located north of Thermalito operated by FRRPD (City of Oroville 2009).

As described in Section 4.14.1 Environmental Setting, there are City-owned parks and recreation facilities distributed consistently throughout the City's planning area, as well as recreational open space, regional, and State parks (City of Oroville 2009). These parks provide recreational opportunities for residents including fishing, hiking, river-rafting, and access to sports fields and the Downtown Skate Park (City of Oroville 2009). Parks within approximately 1.0 mile of the Project site include Hammon Park located approximately 0.25 mile south, Nelson Park located approximately 0.50 mile northwest, Bedrock Park located approximately 0.80 mile south, Rotary Park located approximately 0.85 mile southeast; Bedrock Skate and Bike Park located approximately 0.93 mile south, and Lott-Sank Park located approximately 1.0 mile south.

4.15.2 Recreation (XV.) Environmental Checklist and Discussion

a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project consists of the demolition and replacement of the Butte County FS and UHQ. As described in Section 2.4.2 New Facility Operations and Maintenance, the proposed administrative building would staff an additional three to five employees, resulting in a total of 26 to 28 employees. In addition, the maximum capacity of the barracks would increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary. The Proposed Project does not involve expansion of residential housing and the minimal increase of three to five permanent employees would not generate a substantial increase in the City of Oroville's population; therefore, it would not increase the use of existing neighborhood or regional parks and recreational facilities. No impact would occur.

b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As stated above in item a), the Proposed Project consists of the demolition and replacement of the Butte County FS and UHQ. The Proposed Project does include the demolition of the existing fitness building and construction of a new fitness facility that would be approximately 1,160 square feet located adjacent to the administrative building covered parking area, south of the barracks along the southern site boundary (Figure 4. *Site Plan* and Figure 5. *Site Plan - Detail*). This new fitness facility would be consistent with the existing land use and does not involve an expansion of recreational facilities beyond the CAL FIRE-owned property. Therefore, the Proposed Project would not have an adverse physical effect on the environment. No impact would occur.

4.16 Transportation/Traffic

4.16.1 Environmental Setting

A Traffic Assessment was prepared for the Proposed Project by KD Anderson & Associates. (KD Anderson 2014b; Appendix I). The purpose of the assessment was to collect information on potential traffic impacts that could occur with the implementation of the Proposed Project. The findings of the assessment are summarized below.

Existing Roadway Network

The Project site adjoins Nelson Avenue which provides both regional and direct access to the site. Nelson Avenue links the site with State Route (SR) 70 which lies approximately 700 feet west of the Project site. Other local roads to the south and east can be used to reach the Project site. These include 2nd Street and 3rd Street, which link the Project site with Grand Avenue.

State Route 70 (SR 70) is a state highway which parallels SR 99 through Marysville and Oroville. The highway connects to SR 149 north of Oroville (which in turn provides connection to SR 99), at which point the highway turns towards the northeast, then east, as the highway enters and traverses the Plumas National Forest. Within the immediate vicinity of the Project site, SR 70 is a 4-lane divided limited access freeway. SR 70 serves as the principle north-south facility providing regional access to the City of Oroville, with access provided at interchanges at Garden Drive, Nelson Avenue/Grand Avenue, Montgomery Street, and Oroville Dam Road (SR 162). Caltrans published information regarding the volume of traffic on state highways, and SR 70 is reported to carry an Annual Average Daily Traffic volume of 20,500 vehicles per day in the area north of its connection to Nelson Avenue (KD Anderson 2014b).

Nelson Avenue is an east-west arterial roadway which extends across the northern section of Oroville. Nelson Avenue provides access to SR 70's southbound off ramp and northbound on ramp, and is linked to companion ramps on Grand Avenue via 3rd Street and 4th Street. The eastern section of Nelson Avenue between SR 70 and Table Mountain Boulevard contains a single through lane in each direction along with a two-way center left turn lane, although it is assumed the roadway will eventually be widened to match the City of Oroville's Transportation Capital Improvement Program (TCIP) functional classification as a four-lane arterial. Nelson Avenue has class II bike lanes and either a parking lane or narrow paved shoulders along each side between Table Mountain Boulevard and the Home Depot driveway located ±300 feet east of 3rd Street. The Butte County Association of Governments (BCAG) reports that this segment of Nelson Avenue carries an average of approximately 7,850 vehicles per day. The posted speed limit along Nelson Avenue is 45 miles per hour (mph) west of Table Mountain Boulevard decreasing to 40 mph west of 5th Street (KD Anderson 2014b).

Grand Avenue is an east-west roadway which runs parallel to (and south of) Nelson Avenue, with similar geometrics to Nelson Avenue. BCAG reports that Grand Avenue carries an average of approximately 6,400 vehicles per day. The posted speed limit along Grand Avenue is 35 mph between SR 70 and Table Mountain Boulevard (KD Anderson 2014b).

County Center Drive is a two-lane roadway that adjoins the west side of the Project site. County Center Drive primarily serves Butte County's office buildings within the Butte County Government Center. The roadway begins on the north at Table Mountain Boulevard and continues south to its terminus at a "tee" intersection on Nelson Avenue. Based on the traffic volume observed during

peak hours, the daily traffic volume is estimated to be roughly 3,500 vehicles per day. The posted speed limit on County Center Drive is 25 mph (KD Anderson 2014b).

3rd Street and 4th Street are parallel north-south frontage roads located to the immediate east and west, respectively, of SR 70. The roadways serve as connector roads for SR 70 ramps with 3rd Street connecting the northbound ramps and 4th Street connecting the southbound ramps. Both roadways are partially improved 2-lane roadways with posted speed limits of 25 mph (KD Anderson 2014b).

2nd Street is a local north-south road that connects Grand Avenue and Nelson Avenue in the immediate area of the Project site. 2nd Street begins at a "tee" intersection near the Butte FS and UHQ's existing center access driveway and continues southerly adjacent to the Home Depot store. 2nd Street is a two lane street with a posted speed limit of 25 mph (KD Anderson 2014b).

Del Oro Avenue and Mono Avenue are local streets that serve the area east of the Project site and connect Nelson Avenue with Table Mountain Boulevard. Del Oro Avenue is a two lane street that begins at a "tee" on Nelson Avenue and continues northerly along the Project site to Mono Avenue. Mono Avenue is a two lane east west road that extends from Del Oro Avenue to Table Mountain Road. The posted speed limit is 25 mph along these streets (KD Anderson 2014b).

Traffic Impact Analysis Methodology

Quantitative Level of Service (LOS) analysis was performed for study area intersections based on the methodologies contained in the *2010 Highway Capacity Manual (2010 HCM)* published by the Transportation Research Board. At un-signalized intersections LOS analysis is used to identify the relative delay experienced by motorists who must yield the right of way. A grading scale of LOS "A" to LOS "F" is used to describe the quality of traffic flow, with LOS A representing shorter delays (i.e., < 10 seconds) and LOS F representing conditions where long delays are expected (i.e., > 50 seconds). The extent to which traffic volume satisfy Manual on Uniform Traffic Control Devices peak hour warrants for signalization was also a consideration (KD Anderson 2014b).

Existing Traffic Operations

The quality of traffic operation in this area of Oroville was recently described in the Martin Ranch East Project Traffic Impact Study (Martin Ranch Traffic Impact Study). The Martin Ranch project is located 0.6 miles from the Proposed Project. The Martin Ranch Traffic Impact Study identified weekday a.m. and p.m. peak hour volumes and Levels of Service at intersections in the general vicinity of the proposed project. Table 14 below describes the existing traffic conditions for the Project area.

Table 14. Existing Intersection Level of Service

Intersection	Control	Existing Conditions			
		AM Peak Hour		PM Peak Hour	
		Average Delay (sec)	LOS	Average Delay (sec)	LOS
Nelson Ave / 4th Street / SR 70 SB ramps	NB/SB	10.6	B	11.7	B
Southbound approach	Stop	61.8	F	35.6	E
Northbound approach					
Nelson Ave / 3rd Street / SR 70 NB ramps	NB Stop	14.5	B	16.0	C
Northbound approach					
Nelson Ave / County Center Dr	SB Stop	15.6	C	15.8	C
Southbound approach					

Source: KD Anderson 2014b

As indicated in Table 14, the Nelson Avenue / 4th Street / SB SR 70 ramps intersections operates with LOS F conditions for motorists waiting on the southbound off ramp. The TCIP includes improvements to this intersection (i.e., signalization / roundabout). However current traffic volumes do not satisfy peak hour traffic signal warrants (KD Anderson 2014b).

Proposed Improvements and Anticipated Traffic Operations

The Martin Ranch Traffic Impact Study also identified long-term cumulative traffic conditions in the Project area. These traffic volume forecasts are indicative of year 2035 conditions under the Oroville General Plan. The available volume forecasts presented in that report were drawn from the following two sources:

1. The BCAG regional travel demand forecasting model, and
2. The City of Oroville's Transportation Capital Improvement Program (TCIP) and Traffic Impact Fee Update Report.

Review of those forecasts indicated that the volume of traffic on Nelson Avenue adjoining the Proposed Project is expected to increase by roughly 60 percent by 2035 (KD Anderson 2014b).

The Martin Ranch Traffic Impact Study also identified circulation system improvements that are funded via the City of Oroville's Traffic Impact Fee, including:

1. Nelson Avenue / 4th Street / SB SR 70 ramps: roundabout or traffic signal with separate north-south left turn lanes.
2. Nelson Avenue / 3rd Street / NB SR 70 ramps: traffic signal.
3. Nelson Avenue / County Center Drive: traffic signal.

As described in Table 15, with anticipated improvements already included in adopted funding mechanisms, the circulation system in the Project area is expected to operate with Levels of Service that satisfy the minimum LOS D standard.

Table 15. Year 2035 Intersection Level of Service

Intersection	Control	Existing Conditions			
		AM Peak Hour		PM Peak Hour	
		Average Delay (sec)	LOS	Average Delay (sec)	LOS
Nelson Ave / 4th Street / SR 70 SB ramps	Signal	27.0	C	26.3	C
Nelson Ave / 3rd Street / SR 70 NB ramps	Signal	21.6	C	19,9	B
Nelson Ave / County Center Drive	Signal	40.6	D	23.8	C

Source: KD Anderson 2014b

4.16.2 Regulatory Background

City of Oroville 2030 General Plan Transportation and Circulation Element

Policy P2.1 of the Transportation and Circulation Element of the Oroville General Plan states the following regarding target levels of service goals for City of Oroville facilities:

> *"Maintain a minimum operating standard of LOS D as defined in the most current edition of the Highway Capacity Manual or subsequent revisions for all arterial, collector streets and intersections, except the following facilities where LOS E will be acceptable. LOS E operations will be considered acceptable for intersection and roadway segment operations along Oroville Dam Boulevard between Highway 70 and Olive Highway" (KD Anderson 2014b).*

California Department of Transportation

Since some intersections are ramp intersections along Caltrans state highway SR 70, standards of significance criteria for Caltrans apply. The *Caltrans Guide for the Preparation of Traffic Impact Studies* (December 2002) includes the following generalized statement regarding target levels of service goals for Caltrans facilities.

> *"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing Measure of Efficiency should be maintained."*

Based on these standards, LOS D is the minimum acceptable LOS in the Project area (KD Anderson 2014b).

4.16.3 Transportation/Traffic (XVI.) Environmental Checklist and Discussion

a)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Construction Trip Generation

The Proposed Project would be constructed over an eighteen month period, with 10 to 20 construction employees on the site at various times. Typical construction equipment associated with the building trades would be transported to the site at various times depending on the nature of construction occurring at any time. At various times salvaged and waste materials would be transported from the site by truck, and building materials would arrive. On a daily basis, construction could generate 20 to 40 vehicle trips per day, with most of that activity concentrated into the beginning and ending of the work day.

Operational Trip Generation

Traffic to and from the Project site would also occur on a regular basis during operations of the Butte FS and UHQ. The amount of traffic would vary seasonally. The fire station would be staffed at varying levels throughout the year with a maximum of 20 persons sleeping on-site during the summer. This is an increase from the 15 persons that are accommodated today. In addition, the auto shop staffs three maintenance employees year round and there are 28 administrative staff employees working year round. This is an increase from the 23 administrative staff currently employed at the Butte FS and UHQ.

The number of staff at the Butte FS and UHQ would vary depending on the time of year. During the winter off-season, the Butte FS and UHQ would house four firefighters; however, auto shop and administrative personnel would remain at levels discussed above.

As described in Section 2.4 Operations and Maintenance, the Butte FS and UHQ currently averages over 1,500 emergency responses per year and up to ten “peak events” during the summer. A peak event would include several additional fire control apparatus staging at the fire station or utilizing station facilities (auto shop / warehouse). Additional equipment could include up to 10 fire engines, 2 dozers, 6 fire crew buses and other miscellaneous vehicles.

The amount of vehicular traffic associated with the regular operation during summer staffing of the Proposed Project is provided in Table 16. The project could generate slightly more than 100 daily trips. Most of this traffic would occur when employees are traveling to and from the site, and a “worst case” estimate of peak hour trip generation is 31 trips during the a.m. and p.m. peak hours. However, implementation of the Proposed Project would only result in a small traffic increase

relative to the existing trip generation. Additional trips may result from slightly increased levels of employment (i.e., 3 to 5 administrative employees) and slightly higher bunk capacity. Trip generation relative to fire response would not change. Thus, the net increase in site trip generation is estimated to be 10 daily and 3 peak hour trips.

Table 16. Regular Summer Trip Generation

Land Use	Quantity	Trips						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Fire Station	20 persons	20	0	0	0	0	0	0
Auto Shop	3 employees	8	3	0	3	0	3	3
Warehouse	deliveries	6	0	0	0	0	0	0
Administrative Building	28 employees	70	28	0	28	0	28	28
Total		104	31	0	31	0	31	31
Increase above existing		10	3	0	3	0	3	3

Source: KD Anderson 2014b

The Proposed Project's employees would continue to be drawn from locations throughout the Oroville area, and firefighters would continue to respond to incidents throughout the stations in the Butte County service area. As a result, SR 70 and its interchange at Nelson Avenue would remain the primary regional access to the site. Overall, the Proposed Project may add at most 31 vehicle trips per day to the Project area streets and intersections. This additional traffic would not be a measurable increase in comparison to the volume of traffic already on the system or anticipated in the future. Thus, the Proposed Project would result in a less than significant impact on the existing circulation system.

b)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

See discussion under item a). Overall, the Proposed Project may add at most 31 vehicle trips per day to the Project area streets and intersections. This additional traffic would not be a measurable increase in comparison to the volume of traffic already on the system or anticipated in the future. in comparison to the volume of traffic already on the system or anticipated in the future. Because both existing and long-term background conditions are shown to meet minimum LOS standards, and the Proposed Project's additional traffic is slight, background conditions would be unlikely to change and the Proposed Project would not conflict with LOS standards. A less than significant impact would occur.

c)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

As described in Section 4.8 Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion item e), the Project site is not located within an airport land use plan or within two miles of a public airport. The nearest airport is the Oroville Municipal Airport, located in the far western part of the City, approximately three miles southwest of the Project site. As stated in item a), the Proposed Project is expected to generate 20 to 40 vehicles trips per day during a short-term construction period. Operations would generate an additional 10 vehicles trips per day to the existing Butte FS and UHQ current vehicle trips. Even though there would be an increase in traffic, the increase is not enough to change the LOS standards in the Project area. No changes to air traffic patterns would occur. No impact would occur.

d)	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

The Proposed Project would continue to access adjoining streets, and modifications to existing driveways would be made. The existing Butte FS and UHQ currently has three driveways on Del Oro Avenue. The most southerly driveway is roughly 100 feet north of Nelson Avenue measured centerline to centerline. This driveway is 26 feet wide and full access is permitted at this location today. The Proposed Project would close and replace this driveway with a small two-space handicap parking lot for visitors that would be roughly 140 feet from Nelson Avenue. The existing central driveway on Del Oro Avenue is 200 feet from Nelson Avenue and is 18 feet wide. This driveway is limited to outbound traffic only. The most northerly driveway is immediately adjacent, and full access is permitted at this location. Together these driveways occupy roughly 90 feet of Del Oro Avenue frontage. The Proposed Project would replace these driveways with a single multifunction driveway that will be roughly 100 feet long. The southern 60 feet would be an exit for a three-bay apparatus maintenance area, and the most northerly 30 feet would be a gated access to the rear of the site (KD Anderson 2014b). No impacts would result from the modifications proposed for access along Del Oro Avenue.

The Project site also has two driveways on Nelson Avenue. The most westerly driveway is roughly 100 feet from County Center Drive, measured centerline to centerline. This driveway is roughly 26 feet wide and includes 25-foot radius curb returns. This driveway is limited to right turns in and out by a striped median on Nelson Avenue. The Proposed Project would widen this driveway to 44 feet to accommodate truck turns. The existing center driveway on Nelson Avenue is roughly 240 feet from the western driveway and is also 26 feet wide. The driveway is opposite 2nd Street but slightly offset (i.e., 25 feet to the east). The Nelson Avenue / 2nd Street intersection has been striped to accommodate westbound left turn lanes (i.e., striped left turn lane), but the painted median is striped to preclude eastbound left turns into the Project site. The Proposed Project would widen this driveway to 60 feet to accommodate the turning requirements of trucks. This widened will be in both directions and will not change the off-set between the driveway and 2nd Street (KD Anderson 2014b).

Currently, full access is available at the western Nelson Avenue driveway. Left turn access to the driveway would become a safety hazard with the eventual installation of a traffic signal at Nelson Avenue / County Center Drive (see discussion under section 4.16.1 Environmental Setting). This driveway would need to be limited to right turns in and out only to prevent safety issues once the signalization is installed. In addition, the center driveway on Nelson Avenue currently does not accommodate eastbound left turns and the striping pattern on Nelson Avenue prohibits left turns

into the Project site. The Proposed Project includes eastbound left turns from Nelson Avenue into the Project site. The striping on Nelson Avenue would need to be modified to make those turns legal and to provide an eastbound left turn lane. Furthermore, the proposed center access from Nelson Avenue is slightly offset from 2nd Street across Nelson Avenue. This offset could result in increased risk associated with conflicts between approaching vehicles on Nelson Avenue, 2nd Street and exiting the Project site, which could be a potentially significant impact. Ideally, the planned improvements should be designed to line up the two approaches in order to minimize conflicts between approaching vehicles (KD Anderson 2014b).

Implementation of Mitigation Measure T-1 would reduce impacts associated with access issues on Nelson Avenue to a less than significant level.

Mitigation Measure

T-1 Site Access Planning

A. Limit all access at the western Nelson Avenue driveway to rights turns in and out only.

B. Coordinate with the City of Oroville to modify the striping on Nelson Avenue to provide an eastbound left turn lane to enter the center Nelson Avenue driveway.

C. Prior to finalizing site plans, modify the center Nelson Avenue driveway to line up with 2nd Street across Nelson Avenue.

e)	Would the project result in inadequate emergency access?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Project site is located at the existing Butte FS and UHQ. All construction-related vehicles and equipment would be located within the property boundary during construction. There are no roadway improvements associated with the Proposed Project except for possible restriping of a portion of Nelson Avenue to accommodate an eastbound left turn lane; however, this would not result in impacts to emergency access. The Proposed Project would not prohibit or alter emergency access to the Butte FS and UHQ. No impact would occur.

f)	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

The Proposed Project would not conflict with public transportation programs, plans, or policies. As previously described in item a), traffic could increase during short-term construction-related activities and operation and maintenance of the Proposed Project. Although there will be an overall increase in the daily traffic volume, this would not result in a change to current LOS conditions (KD Anderson 2014b). No impact would occur.

4.17 Utilities and Service Systems

4.17.1 Environmental Setting

Water Service

There are three local domestic water providers for the City of Oroville: California Water Company, Oroville District, South Feather River Power and Water, and Thermalito Water and Sewer District (TWSD). The Project site is within the TWSD service area. As of 2009, TWSD provided water service to approximately 9,500 individuals and it is anticipated service demand will increase to approximately 15,272 individuals by 2025 (City of Oroville 2009).

TWSD primarily receives surface water from Concow Lake/Wilnore Reservoir, with a backup water supply coming from groundwater wells. TWSD has water rights to approximately 8,200 acre-feet per year (7.3 million gallons per day [MGD]) of water from the Concow Lake/Wilnore Reservoir. In addition, TWSD has a backup water supply of approximately 3.0 MGD from groundwater wells. As of 2009, TWSD's current water demand was 2.5 MGD and it is anticipated to grow to 5.0 MGD by 2025. Currently, TWSD has rights to approximately 7.3 MGD annually and the capacity of TWSD's water treatment plant was recently expanded to accommodate up to 10 MGD (City of Oroville 2009).

Wastewater

Wastewater service for the Project site is provided by the City of Oroville. The City of Oroville maintains gravity sewers and pumping stations (seven sewer lift stations and two flow meters) throughout the City, which discharge to trunk sewers owned and operated by the Sewage Commission Oroville Region (SCOR). Wastewater is conveyed from the trunk sewers to the SCOR Regional Wastewater Treatment Plant (Cal Water 2011). The SCOR treatment plant receives wastewater from three services areas: City of Oroville, TWSD, and Lake Oroville Area Public Utility District (City of Oroville 2009).

The SCOR treatment plant's total treatment capacity of dry weather flow wastewater is 6.5 MGD. The plant currently receives an average of 3.0 MGD of dry weather flow, of which approximately 1.6 MGD is generated by the City of Oroville (Cal Water 2011). It is anticipated that dry weather flow wastewater will increase to 5.2 MGD by 2025. The SCOR treatment plant receives an average of 3.3 MGD of wet weather flow and has the capacity to treat up to 15.5 MGD (City of Oroville 2009).

Solid Waste

Norcal Waste Systems of Butte County, Inc. contracts with the City of Oroville for solid waste and recycling services. All waste generated within the City of Oroville is collected and processed at the Oroville Transfer Station. The Oroville Transfer Station receives 200 tons of waste per day and is permitted to receive up to 975 tons of waste per day. After processing, solid waste is transported to the Ostrom Road Landfill located in Wheatland, California (City of Oroville 2009). The Ostrom Road Landfill is operated by Norcal Waste Systems of Butte County and consists of 261 acres, of which 255 acres are permitted as a Class II Landfill. Currently, the landfill receives an average of 26,000 tons per year and is anticipated to reach full capacity of 41.8 million cubic yards in 2066 (Recology 2014).

4.17.2 Utilities and Service Systems (XVII.) Environmental Checklist and Discussion

a)	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The Proposed Project would replace the existing Butte FS and UHQ. Existing utility connections would be removed and replaced with construction of the new facility. As described in Section 4.17.1 Environmental Setting, wastewater service is provided by the City of Oroville and wastewater treatment is provided by SCOR. The Proposed Project is anticipated to generate similar wastewater volumes as the existing Butte FS and UHQ. A small increase of 3 to 5 administrative employees on-site is expected; however, this would not result in a measurable increase in the volume of wastewater generated. In addition, the maximum capacity of the barracks would increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary and would not result in a measurable increase of wastewater generation. As stated in Section 4.17.1 Environmental Setting, the SCOR treatment plant currently has sufficient capacity to treat wastewater received from the City of Oroville (Cal Water 2011; City of Oroville 2009). The small increase of administrative employees on-site would not result in a measurable increase in the wastewater generated and would therefore not exceed the wastewater collection and treatment capacity of the City of Oroville and SCOR (Walls 2014). A less than significant impact would occur.

b)	Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As previously stated in item a), the Proposed Project would replace existing utilities with the construction of the new Butte FS and UHQ, and it is anticipated wastewater volumes generated would be similar to the existing Butte FS and UHQ. The Proposed Project would not exceed the capacity of the City of Oroville sewer systems and the SCOR Wastewater Treatment Plant and would not require expansion or construction of new facilities (Walls 2014).

As described in Section 4.17.1 Environmental Setting, water service is provided by TWSD. As stated above, the Proposed Project would replace existing utilities with construction of the new Butte FS and UHQ. TWSD currently has sufficient capacity to serve its service area needs until 2025 (City of Oroville 2009). It is anticipated that the Proposed Project would have similar water demand as the existing Butte FS and UHQ. The water demand would not exceed the existing capacity of TWSD and would not require expansion or construction of new facilities (Edwards 2014). Thus, a less than significant impact would occur.

c)	Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

The Proposed Project would include demolition of existing on-site drainage systems and construction of new systems. The new drainage systems would connect to the existing storm water drainage systems provided by the City of Oroville. The site is currently paved, and storm water runs off the site to Nelson Avenue. The new Butte FS and UHQ would not generate additional storm water runoff, as the amount of impervious surfaces on-site would be similar to the existing facility. As stated in Section 4.6 Hydrology and Water Quality, BMPs would be implemented during construction to control storm water runoff to prevent excess storm water runoff during construction. A less than significant impact would occur.

d)	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As described in Section 4.17.1 Environmental Setting, TWSD provides water service for the Project site. The maximum daily water demand for TWSD's service area in 2009 was 2.5 MGD. Currently, TWSD has water rights for 7.3 MGD of water, which exceeds the current demand. As stated in item b), water demand for the Proposed Project is anticipated to be similar to the existing Butte FS and UHQ. A small increase of 3 to 5 administrative employees on-site is expected; however, this would not result in a measurable increase in water demand. In addition, the maximum capacity of the barracks would increase from 15 to 20 firefighters; however, the maximum number of 20 firefighters on-site would be temporary during peak events when necessary and would not result in a measurable increase of water demand. It has been confirmed with TWSD that a permanent increase of 3-5 administrative employees on-site would not exceed TWSD existing water supply and the Proposed Project would not result in service issues (Edwards 2014). A less than significant impact would occur.

e)	Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

As previously stated in item a), the Proposed Project would generate similar wastewater volume as the existing Butte FS and UHQ and would not exceed the current capacity of the City of Oroville sewer systems and the SCOR Wastewater Treatment Plant (Walls 2014). A less than significant impact would occur.

f)	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

Construction waste associated with demolition and development of the Project would be deposited at the Ostrom Road Landfill located at 5900 Ostrom Road in Wheatland, California. As stated above in Section 4.17.1 Environmental Setting, the Ostrom Road Landfill is not expected to reach full capacity of 41.8 million cubic yards until 2066. A temporary increase in waste would occur during construction-related activities and is not expected to affect the permitted capacity of the Ostrom Road Landfill. The replacement facility is expected to generate similar waste as the existing Butte FS and UHQ and would not generate a new long-term source of solid waste production that would affect the permitted capacity of the Ostrom Road Landfill. A less than significant impact would occur.

g)	Would the project comply with federal, state, and local statutes and regulations related to solid waste?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

Waste generated by the Proposed Project would comply with statues and regulations related to solid waste. Please see Section 4.8 Hazardous and Hazardous Materials regarding disposal of hazardous waste. No impact would occur.

4.18 Mandatory Findings of Significance

4.18.1 Mandatory Findings of Significance (XVIII.) Environmental Checklist and Discussion

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, 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

Seven special-status bird species and two special-status bat species have the potential to occur on the Project site and may be impacted by Project implementation (ECORP 2014a). Mitigation Measures BIO-1 and BIO-2 would reduce impacts to special-status species to a less than significant level.

No cultural resources that are important examples of major periods of California history or prehistory were encountered during the pedestrian survey of the project site (ECORP 2014b). However, there always remains the possibility that unrecorded cultural resources are present beneath the ground

surface and that such resources could be exposed during construction. Implementation of Mitigation Measure CR-1 would reduce impacts to unknown buried cultural resources to be less than significant. Additionally, the Oroville Tuffs geologic unit present within the Project area has undetermined fossiliferous potential and could potentially be significant for containing nonrenewable paleontological resources (ECORP 2014c). The Project would be developed in an area that has already undergone significant subsurface ground disturbance from the construction of the existing Butte FS and UHQ; therefore, the Project is unlikely to impact significant fossils. Impacts to paleontological resources would be less than significant with the implementation of Mitigation Measure CR-2.

With mitigation measures described in this Initial Study, the Proposed Project would not have a significant impact on fish and wildlife species or their habitat or eliminate important examples of major periods of California history or prehistory.

b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

A search of the CEQAnet Database was completed and the City of Oroville was contacted to compile a list of current and proposed Projects that are located in the vicinity of the Project area within the City of Oroville (CEQAnet Database 2014; Rust 2014). Current and proposed projects are summarized in Table 17.

Table 17. Current and Proposed Projects in the City of Oroville

Project Name	Type of Project	Project Size	Location
Butte County Clerk-Recorder Complex (Hall of Records)	Butte County seeks to finance and construct a Clerk-Recorder Complex, aka Butte County Hall of Records, facility, consisting of approximately 44,500 square feet.	3.88 acres	Cross streets: southeast of Nelson Avenue and 2nd street.
Cal Conley use Permit UP 06-08 & Map Correction COR 06-02	Use Permit to expand a legal nonconforming boat storage area from approximately 1.5 acres to the existing, approximately 4 acre boat storage footprint, and a Certificate of Correction to modify condition 3 of the Parcel Map recorded in Book 146, Pages 8-82 on February 22, 1999 to relocate drainage and remove a 'no development' area.	4 acres	Located on Miners Ranch Road, Parcel No: 072-070-021.
Supplemental Jail Facility	The proposed project entails construction of an approximately 75,000 sf, two-story structure just west of the existing jail.	1.5 acres	Cross streets: Jail Road at County Center Drive.
David and Vicki Scruby Tentative Parcel Map	The applicants are requesting a Tentative Parcel Map to subdivide a 4.70 acre parcel into 2 lots: 2.57 acres (Parcel 1) and 2.13 acres (Parcel 2) in size. The General Plan land use designation of the project site is VLDR and zoned VLDR.	4.70 acres	Cross streets: SR 162 and Middlehoff Lane.

Table 17. Current and Proposed Projects in the City of Oroville

Project Name	Type of Project	Project Size	Location
Redirected Contract PG&E Water from the Micene Canal to the Thermalito Power Canal	California Water Service Company Oroville District (Cal Water) proposes to change a portion of its water conveyance process by redirecting approximately 3,000 AF of its contracted PG&E water from the Miocene Canal to Lake Oroville, to the Thermalito Power Canal, and to the District's water treatment plant.	N/A	Various
Oroville Walmart Project	The proposed project consists of the development of a 200,225 sf Walmart store on 20.75 acres in the City of Oroville.	20.75 acres	Cross streets: Feather River Boulevard and Cal Oak Road.
East Trunk Sewer Replacement Project	Thermalito Water and Sewer District is proposing to replace the existing East Trunk sewer line in Butte County, CA.	N/A	Fifth Avenue and Grand Avenue to Oro Dam Boulevard.
Graphic Packaging International	The project involves the construction of 350,000 sf of new industrial buildings of which 13.6 acres of airport property will be leased for a non-aeronautical use to Graphic Packaging International.	13.6 acres	Oroville Municipal Airport. Cross streets: Northeast of Larkin Road and Airport Parkway.
Creitz TMP 13-0002	Divide two 10-acre parcels into four 5-acre parcels for residential development.	20 acres	Cross streets: Oakvale Road and Foxridge Road.
Lower Feather River Gravel Supplementation and Improvement Project	Restore and create anadromous salmonid spawning and rearing habitat by augmenting the coarse sediment supply with clean gravels. Activities include delivering, stockpiling, and installing up to 10,000 cubic yards of gravel, grading, (including riffle ripping and raking), and excavation.	2.6 acres	Cross streets: Montgomery Street and Washington Avenue (project is approximately 0.6 mile downstream).
Foothill Blvd/Wyman Ravine Bridge Replacement	Removal of the existing bridge, construction of a three span, cast-in-place triple box culvert bridge, and the reconstruction of approximately 800 linear feet of roadway.	The Proposed bridge structure would be approximately 36-feet long with an overall width of 58-feet.	Cross streets: Foothill Blvd. and Oroville-Bangor Highway.
Miners Ranch Water Treatment Plant Improvement Project	The proposed expansion would increase treatment (design) capacity of the plant to 21 mgd.	N/A	Cross streets: Kelly Ridge Road and Heritage Road.
Martin Ranch Subdivision	Mixed-use development project in the northern portion of the City of Oroville.	71 acres	North of Table Mountain Road, APN 031-030-031
Purple Line Winery	Urban winery		760 Safford Street Oroville, California 95965
Verizon Monopine	Wireless telecommunications	N/A	2755 Oro Dam Boulevard Oroville, California 95965

Source: CEQAnet 2014; Rust 2014

The Proposed Project would replace an existing facility and would only result in a minor increase in employees. The minor increase in employees would not result in a significant change to the function of the Butte FS and UHQ. The majority of impacts are associated with temporary, construction-related activities. As described in this Initial Study, potentially significant impacts to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and traffic and transportation have been identified.

Aesthetics. The Proposed Project may result in a change to the lighting pattern due to changes to building configuration and landscaping on-site, which could result in impacts to residential homes along Del Oro Avenue and views from Nelson Avenue. In addition, the flood lighting from the dozer shed discussed above may adversely impact residential homes located along Del Oro Avenue. In order to minimize light spillage onto the adjacent residential properties along Del Oro Avenue and north of the Project site, a lighting plan shall be developed describing specific measures regarding light shielding. Implementation of Mitigation Measure AES-1 would reduce potential adverse impacts to a less than significant level.

Air Quality. Construction-related and long-term operational emissions could result in potentially significant impacts to air quality. However, implementation of mitigation measure AQ-1, AQ-2, and AQ-3 would reduce construction-related and long-term operational impacts to a less than significant level.

Biological Resources. Seven special-status bird species and two special-status bat species have the potential to occur on the Project site and may be impacted by Project implementation (ECORP 2014a). Mitigation Measures BIO-1 and BIO-2 would reduce impacts to special-status species to a less than significant level.

Cultural Resources. No cultural resources that are important examples of major periods of California history or prehistory were encountered during the pedestrian survey of the project site (ECORP 2014b). However, there always remains the possibility that unrecorded cultural resources are present beneath the ground surface and that such resources could be exposed during construction. Implementation of Mitigation Measure CR-1 would reduce impacts to unknown buried cultural resources to be less than significant. Additionally, the Oroville Tuffs geologic unit present within the Project area has undetermined fossiliferous potential and could potentially be significant for containing nonrenewable paleontological resources (ECORP 2014c). The Project would be developed in an area that has already undergone significant subsurface ground disturbance from the construction of the existing Butte FS and UHQ; therefore, the Project is unlikely to impact significant fossils. Impacts to paleontological resources would be less than significant with the implementation of Mitigation Measure CR-2.

Geology and Soils. Based on the plasticity index test results in the geotechnical report prepared for the Proposed Project, the upper three feet of soil underlying the site generally has a potential for shrink-swell behavior. Specific removal, fill and re-compaction recommendations are provided in the geotechnical evaluation. Impacts would be less than significant with implementation of Mitigation Measure GEO-1.

Hazards and Hazardous Materials. The Proposed Project would include the transport, short-term storage and use, and disposal of hazardous materials related to construction, demolition, and the operation and maintenance of the new facilities. BMPs stipulating proper storage of hazardous materials and vehicle fueling would be implemented during construction and demolition as part of the Storm Water Pollution Prevention Plan (SWPPP) and general construction permit. CAL FIRE and its contractors shall follow all applicable federal, state, and local regulations, including Cal-OSHA, California Fire Code, and National Fire Protection Association (NFPA) requirements, and manufacturer instructions for the management, storage, and handling of hazardous materials and hazardous waste for the construction, demolition, and operation and maintenance of the Proposed Project. Impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance would be less than significant with implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4.

Noise. The Proposed Project would generate noise during both construction and operational activities. Based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to these sensitive receptors. Implementation of Mitigation Measure N-1 would reduce construction noise to a less than significant level. Additionally, the backup generators could generate a significant amount of operational noise that could impact nearby residences. At this time there is not enough information available on the proposed backup generators to design appropriate noise control measures. Therefore, specific noise control measures would need to be specified at a later time. The specified noise control measures would be designed to achieve a noise level of 70 dBA, or less, at a distance of 25 feet from the proposed generator building. Implementation of Mitigation Measure N-2 would to reduce impacts to a less than significant level.

Traffic and Transportation. There are safety issues associated with the proposed entrances/exits to the site on Nelson Avenue. Without proper planning, impacts on safety could be potentially significant. Implementation of Mitigation Measure T-1 would reduce impacts to a less than significant level.

Mitigation measures have been proposed to reduce project specific impacts to a less than significant level. Since the Butte FS and UHQ is an existing facility and the Proposed Project is a replacement project, the majority of potential cumulative impacts would be construction-related impacts. Specifically, construction-related traffic could be an issue if multiple planned projects occur at the same time as the Proposed Project. However, as stated in the Initial Study, construction-related traffic would result in 20 to 40 vehicle trips per day. The increase in temporary vehicles trips per day would not interfere with current conditions and would result in a less than significant impact. Additionally, no road closures would be necessary for construction activities. Current and proposed projects in the project area would also implement mitigation as necessary. When taken together with the effects of past projects, other current projects, and probable future projects, the Proposed Projects potential impacts would not be cumulatively considerable.

All other impacts from the Proposed Project are short-term in nature and associated with construction activities on the project site and/or require minimal demand for services and, therefore, would not be cumulatively considerable. No other cumulative impacts were identified.

c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study. Cumulative impacts from the Proposed Project are described in the responses to question b) above.

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