INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

BELL ROAD AT I-80 INTERCHANGE PROJECT PLACER COUNTY

SEPTEMBER 2, 2021

Prepared for:

Placer County
Department of Public Works | Roadway & Bridge Engineering
3091 County Center Drive Suite 220
Auburn, CA 95603

Prepared by:

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De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Proposed Mitigated Negative Declaration for the
Bell Road at I-80 Interchange Project – Placer County

Lead Agency:
Placer County
Department of Public Works | Roadway & Bridge Engineering
3091 County Center Drive Suite 220
Auburn, CA 95603

Project Title: Bell Road at I-80 Interchange Project

Project Location and Setting
The proposed project is located within the southeastern portion of Placer County, California, around 38.9460113 latitude and -121.0473178 longitude and between post miles R20.9 and R21.3. The project site is approximately two miles east of the Auburn Airport and north of Auburn's city limits.

Project Description
The proposed project would construct a six-legged roundabout at Bell Road that includes the Bowman Road intersection and the I-80 WB ramps intersection as well as a five-legged roundabout at Bell Road that includes the I-80 EB ramps intersection and the Musso Road intersection. The roundabouts would be designed to accommodate future growth by year 2045. Intersection geometrics and pedestrian crossings would be consistent with the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition" (Guide).

Roundabout improvements at the Bell Road at I-80 interchange would include, but not be limited to, the following:

- A 10-foot shared use path separated from the roadway with a five-foot minimum landscaped buffer for pedestrian safety and to guide pedestrians to correct crossing locations;
- Crosswalks and Americans with Disabilities Act (ADA) accessible ramps along pedestrian facilities; and
- Vehicular speeds ranging from 15 to 30 mph after project buildout within the interchange.

<u>Pedestrian and Bicycle Safety:</u> The 10-foot shared-use path would convey pedestrian and bicycle traffic through the intersection and provide the opportunity for cyclists to exit the bicycle lane via a bicycle ramp and navigate the intersection on the shared-use path and through the crosswalks. Cyclists would also have the option to exit the bicycle lane and enter the roadway to ride with vehicle traffic through the roundabout.

Crosswalks would be split into two separate crossings through the provision of the pedestrian refuges at the splitter islands. These two-stage crossings would reduce the amount of sustained time a pedestrian is in potential conflict with motorized vehicles by limiting the length of each crossing and limiting each crossing to one direction of vehicle travel at a time.

Pedestrian crossings would be a minimum of one car length from the circulatory roadway, and the pedestrian refuges at the splitter islands would be at least six feet wide, consistent with the NCHRP Guide.

<u>Lighting and Signage:</u> The project would provide enhanced lighting to improve roadway visibility for both drivers and pedestrians/cyclists during nighttime hours. Lighting is anticipated to be installed at ramp merges and diverges along the shoulders of I-80 as well as within the roundabout and at crossings to highlight potential conflict points. The pole lighting would be supported on a cast-in-drilled-hole concrete pile (with a typical diameter of 2.5 feet and length of five feet). New conduits, trenching, and power service connections would be required to install lighting along the shoulders.

Existing local guide signs and regulatory signs would likely be removed and replaced. Additional guide signs would be placed per the California Manual on Uniform Traffic Control Devices (CA MUTCD). Overhead signs would be installed along southbound Bell Road approaching Bowman Road, at the I-80 WB off-ramp, and along the EB off-ramp for direction through the roundabout.

Retaining Walls: The roundabout incorporating Musso Road and Bell Road would require the construction of a retaining wall south of Musso Road. The wall would be approximately 270 feet long with a maximum height of 20 feet. The type of wall is still being determined, but a soil nail wall with a concrete vehicular barrier is the current type selection.

The roundabout incorporating Bowman Road and Bell Road would require the construction of a retaining wall north of Bowman Road. The wall would be up to 440 feet long and have a maximum height of 14 feet. The type of wall is still being finalized, but a concrete Type 1 cantilever retaining wall is the current type selection.

Park-and-Ride Lot: A county-owned park-and-ride lot is located north of I-80 between the westbound I-80 on-ramp and Bowman Road. The park-and-ride lot has approximately 45 parking spaces and provides patrons the option to park their cars for the day for free and connect to van pools. The lot would be slightly reconfigured to maximize spaces and better provide better opportunity for utilization.

Depth of Excavation: Excavation would be required throughout the project in order to construct retaining walls, utilities, and overhead signs. A minimum depth of five feet would be required for improvements to underground utilities. A maximum excavation depth of 25 feet would be required to install the two overhead signs. A maximum excavation depth of 15 feet would be required to install the two retaining walls on the project.

Project Design Alternatives: A No-Build Alternative and one Build Alternative were analyzed for this project. The No-Build Alternative assumes existing lane geometrics and intersection control. The Build Alternative consists of yield-controlled roundabouts with modified lane geometrics. An alternative involving signalized intersections with a widened overcrossing structure as well as an alternative involving a roundabout at the WB off-ramp and the reconstruction of the EB on-ramp to a loop on-ramp were also considered as part of the Project Initiation Document (PID) phase. These two alternatives were ultimately rejected due to the lower overall Level of Service (LOS) that would be able to be achieved, the higher project costs, and the additional right-of-way that would be required to construct.

No-Build Alternative: The No-Build Alternative leaves the existing lane geometrics and intersection controls in place. Under existing conditions, the Bell Road/Bowman Road intersection is controlled by a signal and the Bell Road/Musso Road intersection is stop controlled when traveling southbound along Bell Road. The Bell Road/WB I-80 off-ramp is stop controlled and the Bell Road/EB I-80 off-ramp and northbound Bell Road travel way is stop controlled. The Bell Road at I-80 interchange intersections are approximately 130 feet to 380 feet apart. The no build alternative is rejected.

Build Alternative: This alternative would replace the existing study intersections with two modern, yield-controlled, single and multi-lane roundabouts designed to accommodate the Ultimate Design Year of 2045 traffic forecast volumes. The Build Alternative best meets the safety purpose of the project for all modes of travel, while addressing future mobility needs.

Findings:

In accordance with the California Environmental Quality Act, the County of Placer has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of County staff. On the basis of the Initial Study, the County of Placer hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

Kyle Friedrich 9/2/2021

Signature Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the County and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

MITIGATION MEASURES:

Mitigation Measure VIS-1: *Use Native Species for Erosion Control Seed Mix and Decorative Inert Material Patterns. Exposed surfaces that are not subject to paving would be either seeded in accordance with Caltrans standards regarding erosion control or covered using various inert materials to form aesthetically pleasing patterns. The seed mix used would only include California native plants. A native grass and forb seed mix would be used in areas disturbed that are on the outside perimeter of the proposed work area. The islands, median, and backup areas between the road and sidewalks would be covered using different shapes, colors, and patterns of gravel, cobble, and other permeable inert material. See Attachment A of the VIA for Landscape Concept and identification of treatment areas. The Landscape Concept is consistent with the Placer County Landscape Design Guidelines.*

Mitigation *Measure VIS-2: Vegetation Preservation. Vegetation clearing would only occur within the delineated project boundaries in an effort to minimize the impacts. Trees located in areas along the edge of the construction zone would be trimmed whenever possible and no trees of significance would be removed. The project will obtain a Tree Permit from the Placer County Community Development Resource Agency to mitigate tree removal for the project, if needed.*

Mitigation *Measure VIS-3: Implement Retaining Wall Aesthetics. A roughened wall surface softens the verticality of the wall face by providing visual texture and reducing the amount of smooth surface that can reflect light. Choosing earth-toned colors for the wall surface is less distracting to viewers and helps the wall blend with the planted vegetation as it matures. Adding a design motif to the wall face that reflects natural materials reduces visual monotony, softens verticality, and is more pleasing to viewers than a plain wall surface. Based on the project area, a more natural-looking wall treatment would be applied on the retaining wall(s) that would be public facing. Aesthetic treatments will be applied to retaining walls to reduce visual impacts and match characteristics of the existing area. The retaining wall will be included in a visual simulation for public outreach prior to final design.*

Mitigation Measure VIS-4*: Temporary Construction Lighting. At a minimum, the construction contractor would minimize project-related light and glare to the maximum extent feasible, given safety considerations. The number of nighttime lights used would be minimized to the greatest extent possible.*

Mitigation Measure VIS-5*: Overhead Street Lighting. All overhead street lighting would be limited to the minimum required for driver safety and would be designed in accordance with Caltrans' standards. All lighting would cause the minimum impact possible to the surrounding environment.*

BIOLOGICAL RESOURCES

Mitigation Measure BIO 1. *If project activities must occur during the nesting season (February 1 - September 30), a qualified biologist will conduct pre-construction surveys for active raptor and migratory bird nests within 3 days prior to the onset of these activities. For migratory birds and raptors, the survey area will include the biological study area (BSA), as well as adjacent habitat that is visible with optics from the BSA. If no active nests are found within the survey area, no further mitigation is required.*

- *Should any active nests be discovered within the biological survey area (BSA), the biologist will determine the appropriate construction setback distances in coordination with CDFW and/or the biology of the affected species. Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged. If active nests are discovered, the applicant shall notify Placer County and CDFW.*

Mitigation Measure BIO 2: *To avoid effects to bats, a qualified biologist will conduct pre-construction surveys for bats within the crevices of the overcrossing structure within 7 days prior to the onset of construction activities. If no evidence of bats are found under the Bell Road at I-80 overcrossing, no further mitigation is required.*

- *If it is determined that bats are using the overcrossing structure, it should be determined by the biologist whether the use is for maternal roosting (generally April – August).*
  - *If it is a non-maternal roost site:*
    - *If the final design doesn't call for any disturbance to the overcrossing, then nothing further would be necessary.*
    - *If any disturbance to the overcrossing is necessary, exclusionary devices will be installed so the bats cannot use the overcrossing for roosting during construction and will relocate. These devices should only be installed during the non-maternal and non-mating season (generally September – February). After the exclusionary devices have been installed, the contractor must wait seven days before work can commence. By waiting the seven days, the bats can exit the overcrossing and relocate. Installed exclusionary devices are designed to allow bats to exit, but there is not an ability to re-enter. Once these devices have been installed, they must be maintained by the contractor for the duration of construction and kept in good working order. Work on the overcrossing deck can occur anytime without work window restrictions.*
  - *If it is a maternal roost site:*
    - *If the final design doesn't call for any disturbance to the overcrossing, the applicant shall retain a bat specialist to conduct construction worker awareness, establish orange fencing to keep activities away from the roost, and continue with monitoring to ensure that there is no disturbance that could jeopardize the roost.*
    - *If any disturbance to the overcrossing is necessary, construction must be performed outside of the maternal roosting season which occurs April through August*

Mitigation Measure BIO 3. *Replanting/Erosion Control: All areas disturbed during construction activities shall be revegetated with a selection of regionally appropriate native species of grasses, forbs, and wildflowers for erosion control. Plant genera to consider include Ceanothus.*

CULTURAL RESOURCES

Mitigation Measure CUL-1: *If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*

Work cannot continue at the discovery site 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; or 3) not a significant Public Trust Resource.

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, shall be retained at the Applicant's expense. This measure shall be included on the Notes sheet of the project's Improvement Plans.

***Mitigation Measure CUL-2**: If human remains are discovered during the course of construction, work shall be halted at the site and any nearby area reasonably suspected to overlie adjacent human remains until he County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*

- *The coroner will contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner will make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
- *The project proponent shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
    - *The Native American Heritage Commission is unable to identify a descendent.*
    - *The descendant identified fails to make a recommendation.*

***Mitigation Measure CUL-3:** Prior to start of construction, all construction and personnel involved in ground disturbing activities and the supervision of such activities will undergo worker environmental awareness training for the identification and best practices for cultural resources. Training will be presented by a Placer County approved cultural resources consultant.*

GEOLOGY AND SOILS

***Mitigation Measure GEO-1:** Prior to earthmoving activities, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. The grading and improvement plans shall be designed in accordance with the recommendations provided in the final geotechnical evaluation*.

***Mitigation Measure GEO-2:** If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the Placer County shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.*

GREENHOUSE GAS EMISSIONS

***Mitigation Measure GHG 1:** Consistent with CAPCOA's Measure C-3: Limit Construction Equipment and Heavy-duty vehicles Idling beyond Regulation Requirements set by the California Air Resources Board (CARB) Heavy-Duty Vehicle Idling Emission Reduction Program which limits diesel-fueled commercial motor vehicles idling time to 5 minutes.*

Require idling times of 3 minutes or less during loading/unloading and during layovers or rest periods with the engine still on. This measure is not applicable when providing a power source for equipment or operations such as lift, crane, pump, drill, hoist or other auxiliary equipment. This requirement shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the requirement.

Measure GHG 2: *Require the construction contractor to follow Placer County Air Pollution Control District's Recommended Construction Mitigation Measures including but not limited to:*

- *Maintaining all construction equipment properly according to manufacturer's specifications.*
- *Use Electrified equipment when feasible*
- *Use alternatively fueled construction equipment on-site where feasible*

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: *Prior to project implementation a Hazardous Materials Business Plan shall be submitted to the County. In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the Placer County Health and Human Services Department. The SMP shall establish management practices for handling and disposal of hazardous materials, including fuels, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

Mitigation Measure HAZ 2: *Implement measures based on the findings of the PSI-ADL study including:*

- *The contractor(s) shall prepare a project-specific Lead Compliance Plan (CCR Title 8, §1532.1,"Lead in Construction" standard) to minimize worker exposure to lead-containing soil along Bell Road and should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-containing soil.*
- *Manage ADL waste per:*
    - *Caltrans-DTSC Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (June 2016) for re-use and disposal.*
    - *Caltrans Standard Specification Section 7-1.02K(6)(j)(iii) (DOCX) (10/19/2018) - Earth Material Containing Lead – Requires a lead compliance plan for soil disturbance when lead concentrations are non-hazardous.*
    - *Caltrans Standard Specification Section 14-11.08 - Regulated Material Containing Aerially Deposited Lead (2018).*
    - *Caltrans Standard Specification Section 14-11.09 - Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead (2018).*
- *Worker Safety Training shall include exposure to Arsenic and Chromium in soil (above RWQCB ESL levels).*
- *Dispose of excavated soils as Non-hazardous waste at Class II unit or Class III landfill depending on facility acceptance standard, consistent with CCR Title 22 §66262.11 waste classification.*
- *All asphalt concrete (AC) materials should be recycled per the Caltrans directive for reclaimed AC (AB 1306), in accordance with the January 27, 1993 Memorandum on "Department of Fish and Game Agreement on AC Grindings, Chunks and Pieces."*
- *Caltrans Asphalt-Concrete and Portland Cement Concrete Grindings Reuse Guidance (2007).*
- *Caltrans Standard Specification Section 60-2.01A (DOCX) (10/19/2018) – Use for removing structures or portions of structures, including bridges, retaining walls, sound walls, and other concrete or masonry structures.*
- *Caltrans Standard Specification Section 60-2.02 (DOCX) (10/19/2018) – Use for bridge removal work.*
- *Treated wood removed from the project area would be managed in accordance with Title 22, Division 4.5, Chapter 34 of the California Code of Regulations.*
- *Abate transformers prior to construction; PG&E manages the electric lines and transformers.*
- *Abate striping prior to construction following Caltrans' 2018 Standard Specifications:*

- *Caltrans Standard Specification Section 14-11.12 (DOCX) (10/19/2018) - Remove Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue – Requires proper management of hazardous waste residue and a lead compliance plan.*
- *Caltrans Standard Specification Section 36-4 (DOCX) (10/19/2018) - Containing Lead from Paint and Thermoplastic - Requires a lead compliance plan for removal when residue is definitely non-hazardous.*
- *Caltrans Standard Specification Section 84-9.03C (DOCX) (10/19/2018) - Remove Traffic Stripes and Pavement Markings Containing Lead - Requires a lead compliance plan for removal when residue is definitely nonhazardous. Used for new yellow paints and all other colors of paint.*

Mitigation Measure HAZ 3: *The implementing agency shall develop a traffic control plan for construction projects to reduce the effects of construction on the roadway system throughout the construction period. As part of the traffic control plan, project proponents shall coordinate with emergency service providers to ensure that emergency routes are identified and remain available during construction activities.*

HYDROLOGY AND WATER QUALITY

Mitigation Measure Hydro-1: *The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the County of Placer and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Mitigation Measure Hydro-2: *The project's storm drainage infrastructure plans shall, to the satisfaction of the County engineer, demonstrate adequate infrastructure capacity to collect and retain, or direct stormwater generated on the project site to the existing and future stormwater conveyance system.*

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Appendix B: Construction Emissions Analysis Memo

Appendix C: Transportation Operations Analysis Report (TOAR)

Appendix D: Natural Environment Study (NES)

Appendix E: Geotechnical Design and Materials Report

Appendix F: Climate Change Technical Memorandum

Appendix G: Preliminary Site Investigation-Aerially Deposited Lead (ADL) Report

Appendix H: Air Quality Report

INITIAL STUDY CHECKLIST

PROJECT TITLE

Bell Road at I-80 Interchange Project

LEAD AGENCY NAME AND ADDRESS

Placer County
Department of Public Works | Roadway & Bridge Engineering
3091 County Center Drive Suite 220
Auburn, CA 95603
Kyle Friedrich, P.E., Associate Civil Engineer
(530) 745-7522 | (530) 745-3540 fax
kfriedri@placer.ca.gov

PROJECT LOCATION AND SETTING

The proposed project is located within the southeastern portion of Placer County, California, around 38.9460113 latitude and -121.0473178 longitude and between post miles R20.9 and R21.3 (see Figure 1 Regional Location Map). The project site is approximately two miles east of the Auburn Airport and north of Auburn's city limits (see Figure 2 Vicinity Map).

PROJECT PURPOSE AND NEED:

The purpose of the project is to maximize the existing infrastructure to efficiently convey traffic safely through the interchange. The secondary purpose of this project is to improve operations, reduce delay, and enhance mobility for all travel modes at the interchange.

Congestion in the project area during the AM and PM peak hours has affected the efficiency of the interchange to the point where the traffic is backing up onto the mainline. This condition is an operational and safety concern for Placer County and Caltrans that needs to be addressed.

PROJECT DESCRIPTION:

The proposed project would construct a six-legged roundabout at Bell Road that includes the Bowman Road intersection and the I-80 westbound (WB) ramps intersection as well as a five-legged roundabout at Bell Road that includes the I-80 eastbound (EB) ramps intersection and the Musso Road intersection. The roundabouts would be designed to accommodate future growth anticipated by 2045. Intersection geometrics and pedestrian crossings would be consistent with the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition" (Guide). Roundabout improvements at the Bell Road at I-80 interchange would include, but not be limited to, the following:

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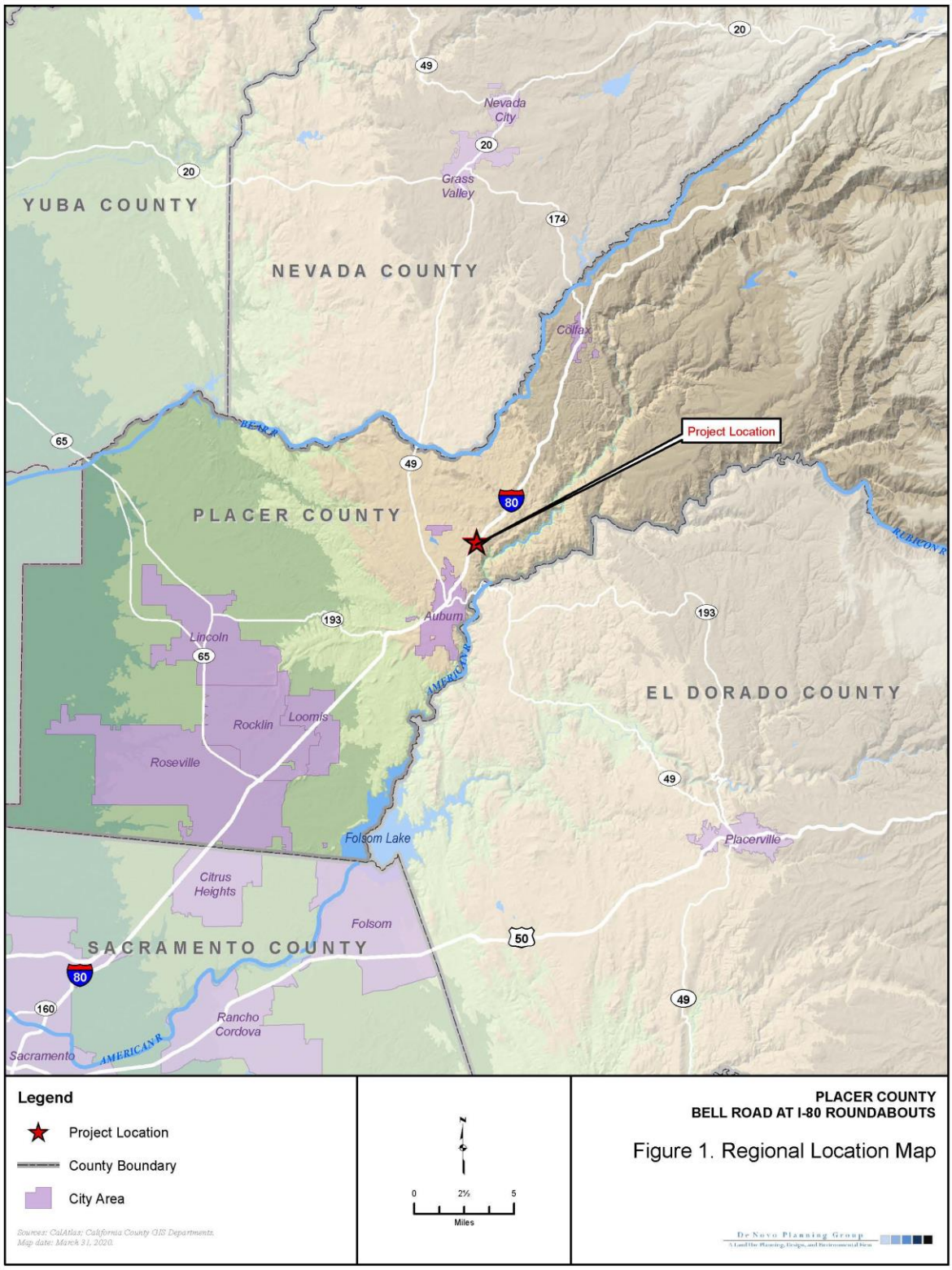
Figure 4 shows the proposed site plan layout.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The County of Placer is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

This document will be used by the County to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND);
- Adoption of the Mitigation Monitoring and Reporting Program;
- County review and approval of the Grading and Improvement Plans.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NEVADA COUNTY
PLACER COUNTY
EL DORADO COUNTY
SACRAMENTO COUNTY
Nevada City
Grass Valley
Colfax
Project Location
Auburn
Lincoln
Rocklin
Loomis
Roseville
Folsom Lake
Placerville
Citrus Heights
Folsom
Rancho Cordova
Sacramento
BEAR R.
AMERICAN R.
RUBICON R.
20
49
174
65
193
80
50
160
Legend
Project Location
County Boundary
City Area
Sources: CalAtlas; California County GIS Departments.
Map date: March 31, 2020.
0
2½
5
Miles
PLACER COUNTY
BELL ROAD AT I-80 ROUNDABOUTS
Figure 1. Regional Location Map
De Novo Planning Group

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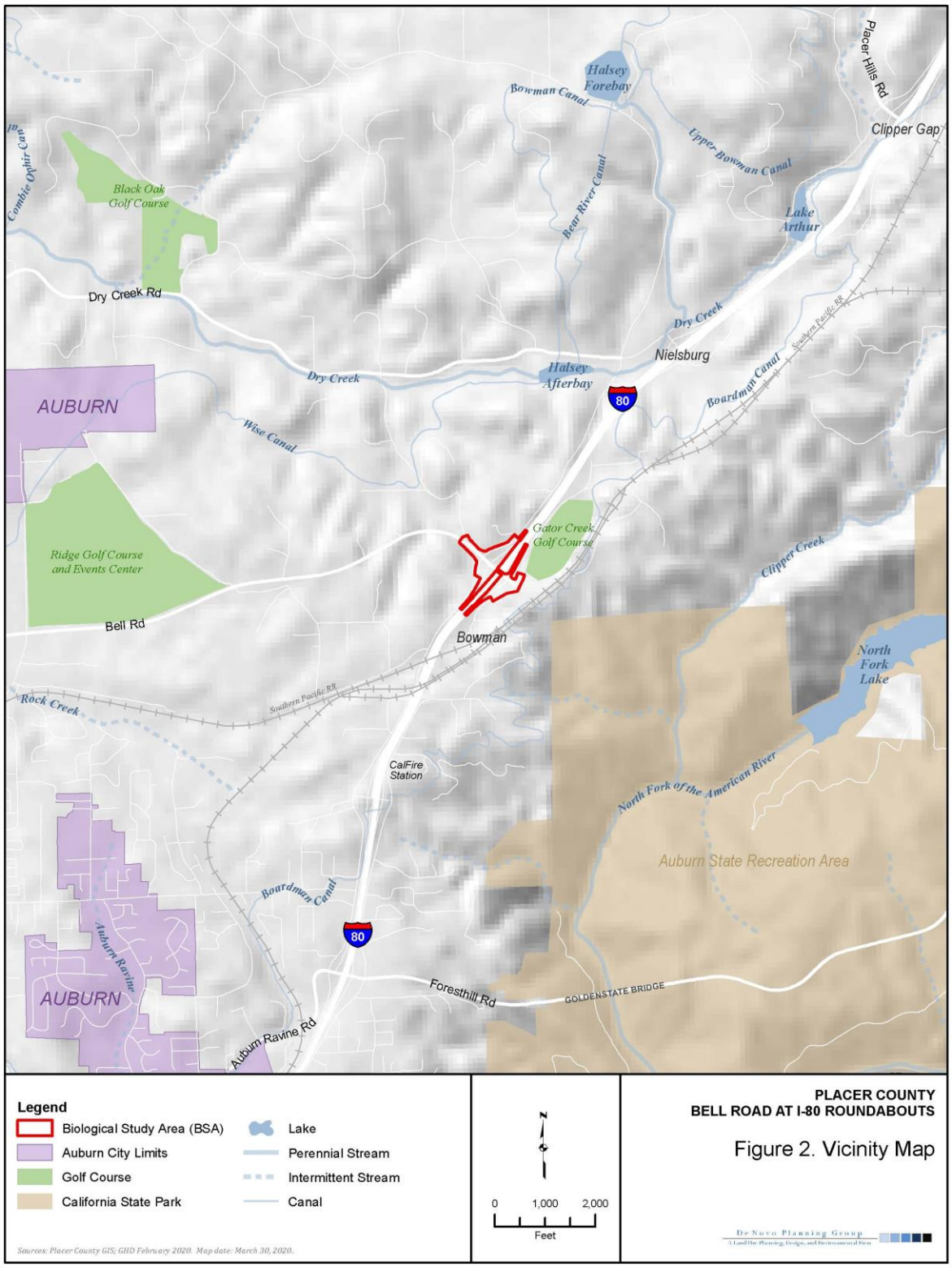
Halsey Forebay
Bowman Canal
Placer Hills Rd
Clipper Gap
Upper Bowman Canal
Combie Ophir Canal
Black Oak Golf Course
Bear River Canal
Lake Arthur
Dry Creek Rd
Dry Creek
Southern Pacific RR
Nielsburg
Halsey Afterbay
Boardman Canal
AUBURN
Wise Canal
80
Gator Creek Golf Course
Clipper Creek
Ridge Golf Course and Events Center
Bell Rd
Bowman
North Fork Lake
Rock Creek
Southern Pacific RR
CalFire Station
North Fork of the American River
Auburn State Recreation Area
Boardman Canal
Auburn Ravine
AUBURN
80
Foresthill Rd
GOLDENSTATE BRIDGE
Auburn Ravine Rd
Legend
Biological Study Area (BSA)
Auburn City Limits
Golf Course
California State Park
Lake
Perennial Stream
Intermittent Stream
Canal
N
0 1,000 2,000
Feet
Sources: Placer County GIS; GHD February 2020. Map date: March 30, 2020.
PLACER COUNTY
BELL ROAD AT I-80 ROUNDABOUTS
Figure 2. Vicinity Map
De Novo Planning Group

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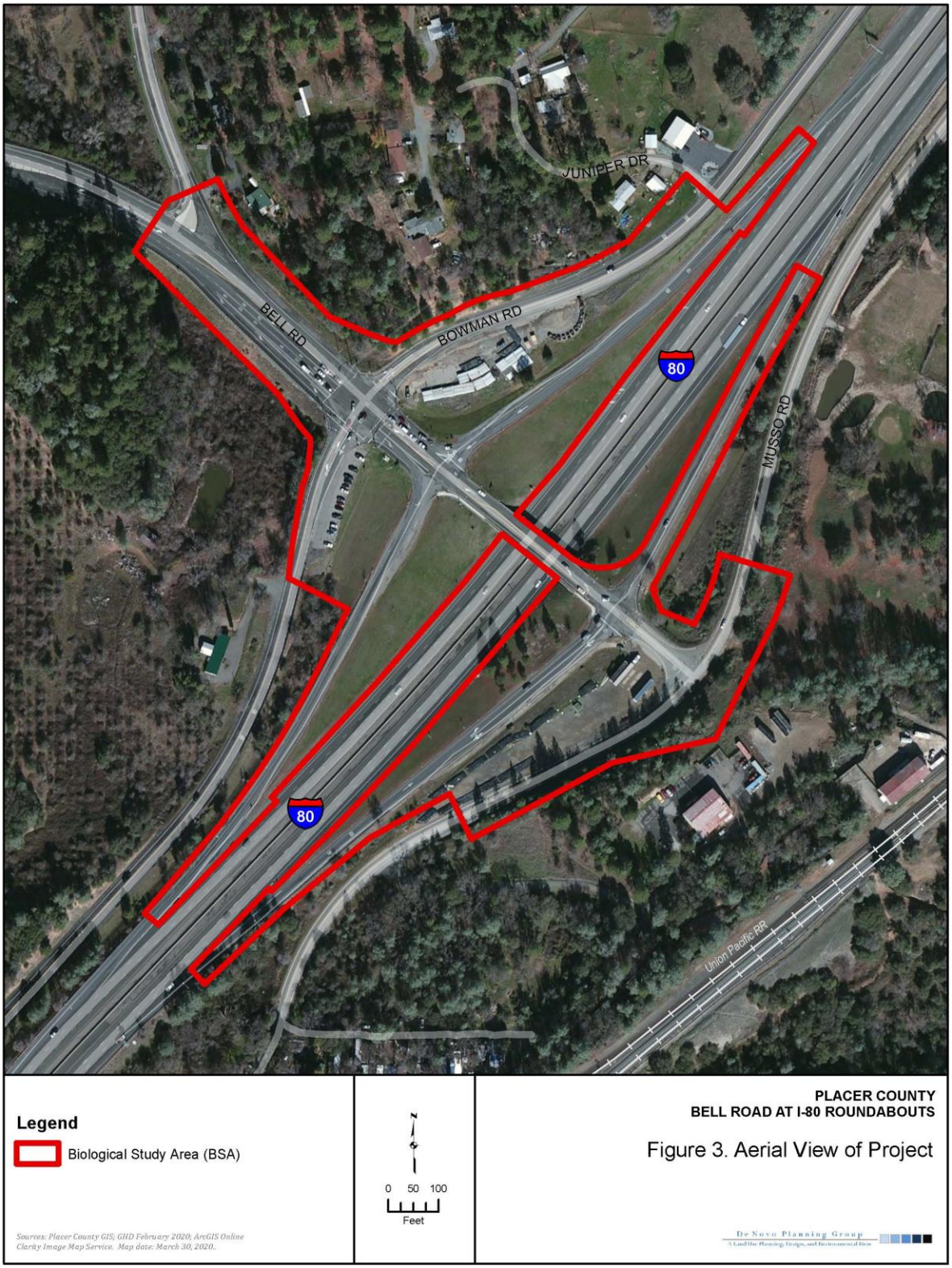
JUNIPER DR
BELL RD
BOWMAN RD
80
MUSSO RD
80
Union Pacific RR
Legend
Biological Study Area (BSA)
N
0 50 100
Feet
PLACER COUNTY
BELL ROAD AT I-80 ROUNDABOUTS
Figure 3. Aerial View of Project
Sources: Placer County GIS; GHD February 2020; ArcGIS Online Clarity Image Map Service. Map date: March 30, 2020.
De Novo Planning Group

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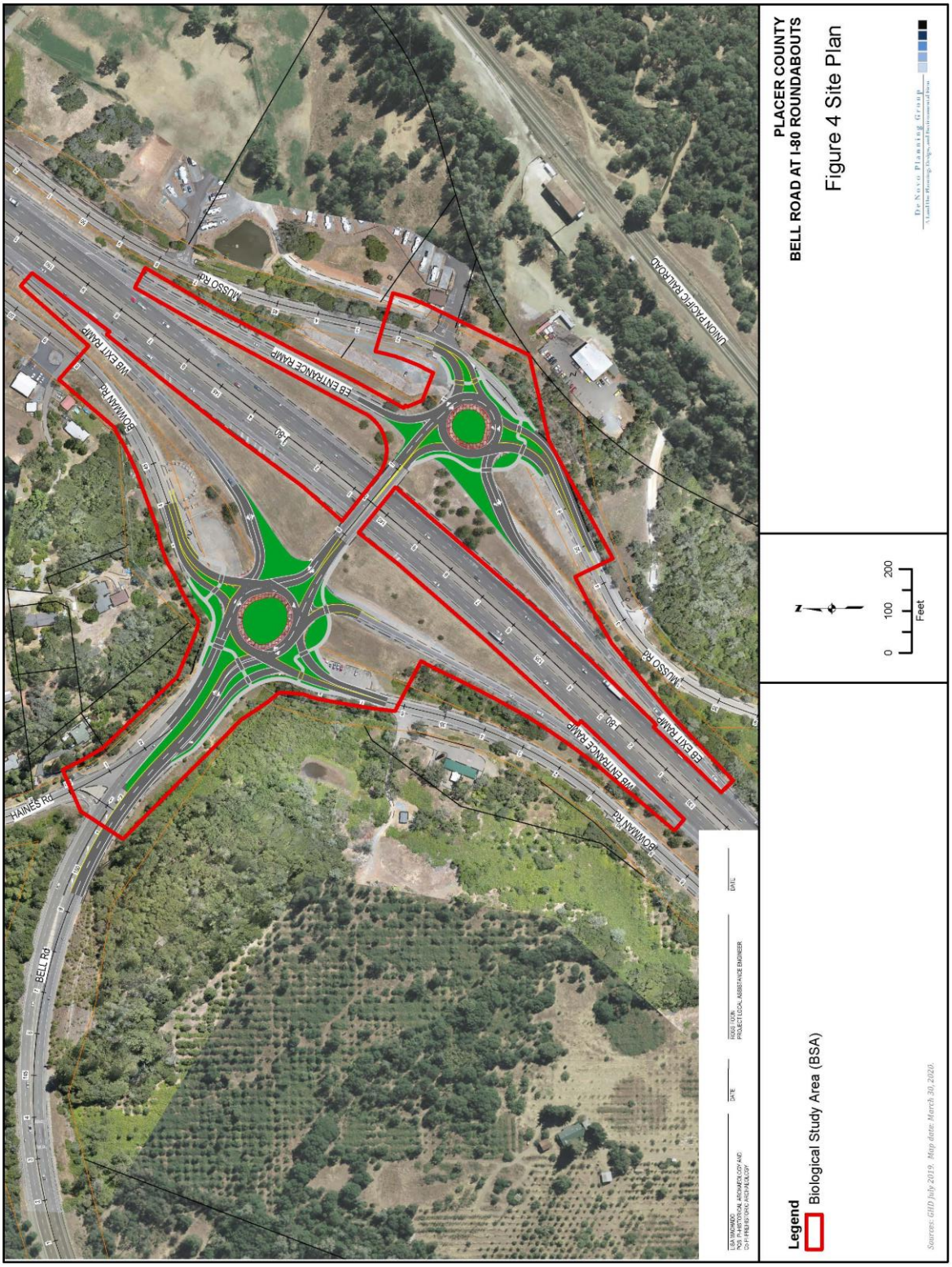
PLACER COUNTY
BELL ROAD AT I-80 ROUNDABOUTS
Figure 4 Site Plan
Legend
Biological Study Area (BSA)
0 100 200
Feet
BELL Rd
HAINES Rd
WB EXIT RAMP
BOWMAN Rd
EB ENTRANCE RAMP
I-80
MUSSO Rd
UNION PACIFIC RAILROAD
WB ENTRANCE RAMP
EB EXIT RAMP

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

None of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology and Soils		Greenhouse Gasses		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

EVALUATION INSTRUCTIONS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas. The analysis assumes local state and federal laws are applied and followed, as well as recommendations included within technical studies prepared for the project.

I. AESTHETICS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

Responses to Checklist Questions

Responses a), c):

A Visual Impact Assessment (VIA) was conducted for the proposed project (Visual Impact Assessment for Bell Road at I-80 Interchange Project; included as Appendix A). A number of aesthetic options were analyzed as part of the visual assessment process, and the County is looking to move forward with an alternative similar to Option 1 that includes roundabout landscape elements that increase visibility and landscape buffer/strip elements that harmonize with central island features. A combination of revegetation and/or inert materials will be incorporated that are context-sensitive.

With the exception of lighting poles and retaining walls, all changes to the intersection would occur at ground level and have minimal impact to existing scenic views. Signal control poles and devices would be removed.

Vegetation would be preserved to the extent possible and no removal of trees of significance is anticipated. All landscaping proposed by the project will be compliant with the Water Efficiency Landscape Ordinance requirements.

Public facing retaining walls would be treated with a roughened wall surface to soften the verticality of the wall face by providing visual texture and reducing the amount of smooth surface that can reflect light and visually impact existing views. Aesthetic treatments will be applied to retaining walls to reduce visual impacts and match characteristics of the existing area. The retaining wall will be included in a visual simulation for public outreach prior to final design.

Visual impacts due to project construction would be short-term (8-12 months) and would cease upon project completion. The construction footprint would be as minimal as possible to ensure the preservation of existing vegetation and trees. Vegetation areas temporarily disturbed by construction would be reseeded and temporary irrigation would be installed if needed. The project will obtain a Tree Permit from the Placer County Community Development Resource Agency to mitigate tree removal for the project, if needed.

Implementation of the project would not greatly alter the area's overall visual characteristics. The VIA concluded that the proposed project would result in moderate-low visual impacts for all users, and visual character and quality of the existing interchange would ultimately be improved.

The following measures to minimize visual impacts were identified in the VIA and will be incorporated into the project (reprinted from the VIA) as mitigation measures:

Mitigation Measures:

Mitigation Measure VIS-1: *Use Native Species for Erosion Control Seed Mix and Decorative Inert Material Patterns. Exposed surfaces that are not subject to paving would be either seeded in accordance with Caltrans standards regarding erosion control or covered using various inert materials to form aesthetically pleasing patterns. The seed mix used would only include California native plants. A native grass and forb seed mix would be used in areas disturbed that are on the outside perimeter of the proposed work area. The islands, median, and backup areas between the road and sidewalks would be covered using different shapes, colors, and patterns of gravel, cobble, and other permeable inert material. See Attachment A of the VIA for Landscape Concept and identification of treatment areas. The Landscape Concept is consistent with the Placer County Landscape Design Guidelines.*

Mitigation *Measure VIS-2: Vegetation Preservation. Vegetation clearing would only occur within the delineated project boundaries in an effort to minimize the impacts. Trees located in areas along the edge of the construction zone would be trimmed whenever possible and no trees of significance would be removed. The project will obtain a Tree Permit from the Placer County Community Development Resource Agency to mitigate tree removal for the project, if needed.*

Mitigation *Measure VIS-3: Implement Retaining Wall Aesthetics. A roughened wall surface softens the verticality of the wall face by providing visual texture and reducing the amount of smooth surface that can reflect light. Choosing earth-toned colors for the wall surface is less distracting to viewers and helps the wall blend with the planted vegetation as it matures. Adding a design motif to the wall face that reflects natural materials reduces visual monotony, softens verticality, and is more pleasing to viewers than a plain wall surface. Based on the project area, a more natural-looking wall treatment would be applied on the retaining wall(s) that would be public facing. Aesthetic treatments will be applied to retaining walls to reduce visual impacts and match characteristics of the existing area. The retaining wall will be included in a visual simulation for public outreach prior to final design.*

With the exception of lighting poles and retaining walls, all changes to the intersection would occur at ground level and have minimal impact to existing scenic views. Implementation of the proposed project with the above mitigation measures would ensure that there would be a ***less than significant*** impact relative to this topic.

Response b): The project site is not located within view of a state scenic highway. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees of significance, rock outcroppings, and historic buildings within a state scenic highway. Implementation of the proposed project would have ***no impact*** relative to this topic.

Response d): Bell Road and I-80 in the vicinity of the project are locally designated as scenic corridors; the project is consistent with relevant policies outlined in the local Auburn/Bowman Community Plan.

There is a potential for the proposed project to introduce new sources of light and glare into the project area during construction and operation. Contributors to light and glare impacts would include temporary construction lighting that would create ongoing light impacts to the area, as well as operational lighting to minimize light pollution, the lights would be shielded and downcast, compliant with Caltrans standards. Signal control devices emitting light would be removed. The proposed project would have a minor effect on day or nighttime views of the area. Additional avoidance and minimization measures to reduce or prevent light and glare are described in the Visual Impact Assessment. The following measures to minimize visual impacts were identified in the VIA and will be incorporated into the project (reprinted from the VIA) as mitigation measures:

Mitigation Measures:

> ***Mitigation Measure VIS-4****: Temporary Construction Lighting. At a minimum, the construction contractor would minimize project-related light and glare to the maximum extent feasible, given safety considerations. The number of nighttime lights used would be minimized to the greatest extent possible.*
>
> ***Mitigation Measure VIS-5****: Overhead Street Lighting. All overhead street lighting would be limited to the minimum required for driver safety and would be designed in accordance with Caltrans' standards. All lighting would cause the minimum impact possible to the surrounding environment.*

Implementation of the proposed project with the above mitigation measures would ensure that there would be a ***less than significant with mitigation incorporated*** impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Responses to Checklist Questions

Responses a), e):

The Placer County Important Farmland 2016 Map depicts that majority of the area and the vicinity has not been mapped for any farmland of regional, or state importance, and there are no Williamson Act contracts in the vicinity (California Department of Conservation 2016). The project site is located on Vacant or Disturbed Land, and ROW. The proposed project site does not contain important Farmland as identified by the California Resources Agency. Additionally, the project area does not contain forestland or timberlands as defined by PRC Section 4526.

There is no potential for the project to result in a conversion of forest or agricultural land, and there is no farmland or forest land associated with the project; therefore, there would be ***no impact*** on forestland, or farmland.

Response b):

The project site is not under a Williamson Act contract. The improvements generally would be within a similar footprint as the existing roadway. There are agricultural uses within the area, and agricultural designated lands adjacent to the project area, however, the roadway improvements would not impact agricultural uses. The proposed project would not conflict with existing area zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have *a* ***less than significant*** impact relative to this issue.

Response c):

The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not

conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response d):
The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have ***no impact*** relative to this issue.

III. AIR QUALITY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) 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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Existing Setting

The project site is located in the Sacramento Valley Air Basin portion of Placer County Air quality within the project area is regulated by several agencies including the United States Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the Placer County Air Pollution Control District (APCD). These agencies develop rules, regulations, policies, and/or plans to achieve the goals and directives imposed through legislation.

The Placer County APCD agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the Placer County APCD. The APCD has primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

The County is currently designated as nonattainment for the ozone 8-hour standard and the particulate matter, particles of 2.5 micrometers or smaller (PM2.5), standard. The County is designated as unclassified/attainment for nitrogen dioxide, carbon monoxide, and unclassified for particulate matter, particles of 10 micrometers or smaller (PM10).

Pursuant to Placer County Air Pollution Control District (PCAPCD) regulations, the project would have a significant impact on air quality if it would result in project-generated emissions in excess of the following:

- Reactive Organic Gases (ROG) – 82 pounds per day (lbs/day);
- Oxides of Nitrogen (NOx) – 82 lbs/day
- Particulate Matter (PM10) – 82 lbs/day

In addition, according to the Placer County APCD, a project would result in considerable contribution to a cumulative impact to air quality if it would result in:

- A net increase in long-term operational emission of ROG or NOx that exceeded 55 lbs/day or emissions of PM10 that exceeded 82 lbs/day.

Responses to Checklist Questions

Responses a-b):

Projects that could generate emissions over the Placer County APCD recommended significance thresholds would be considered to potentially conflict with or obstruct implementation of the applicable air quality plan. The Placer County APCD has identified the most common sources of emissions from construction projects as site preparation, grading, and general construction use of heavy equipment. The emissions generated from these activities include the following:

- Combustion emissions: (ROG, diesel particulate matter, NOx, carbon monoxide, sulfur oxides) from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips
- Fugitive dust (PM10) from soil disturbance, including grading and land clearing

Projects have the potential to produce air pollutant emissions during construction activities, but also have the potential to reduce area emissions during operations by improving circulation and encouraging non-motorized trips.

Construction Emissions

Construction of the project would result in short-term increases in emissions caused by typical construction activities, such as grading and excavation, and vehicle exhaust from construction equipment. Increased emissions would consist of ROG, nitrogen dioxide and emissions of PM10, carbon monoxide, sulfur dioxide, and NOx. Emissions of ozone-precursors could result from the operation of both on and off-road motorized vehicles and equipment.

As described in the Construction Emissions Analysis (Appendix B) maximum daily construction exhaust emissions for the project were estimated using the RoadMod (RCEM) Model (version 9.0.0). Inputs to the model included the construction years, total expected duration, proposed equipment usage, and total road length constructed. Other model inputs such as soil import and export, concrete and asphalt truck trips were input to the model. The model predicts emissions of ozone precursor pollutants (i.e., ROG and NOx) and particulate matter (i.e., PM10, and PM2.5). Conservative estimates for all model inputs were used to present a 'worst-case' scenario of emissions generated by construction of the project.

Table 1 displays a summary of the maximum daily emissions estimates associated with construction of the Project. Short-term construction-generated emissions are not projected to exceed applicable thresholds of significance due to the short duration required for construction and adherence to County requirements.

Table 1. Estimated Construction Emissions for Project Construction

Scenario	ROG	NOx	Total PM_{10} (Exhaust + Dust)
maximum daily emissions (pounds)[1]	5.04 lbs/day	53.46 lbs/day	6.27 lbs/day
PCAPCD's daily threshold of significance	82 lbs/day	82 lbs/day	82 lbs/day

Table Notes:
[1]Assumes 180 workdays total (two 4-month construction seasons)
lbs/day = pounds per day
NOx = nitrogen oxides
PM = particulate matter; number refers to size of PM in microns in diameter or smaller
ROG = reactive organic gases

The construction-generated emissions output is summarized in Table 1. The construction emissions associated with the project do not exceed the PCAPCD's daily thresholds of significance for any of the three applicable criteria air pollutants. Therefore, construction generated emissions associated with the project would result in a less than significant impact.

Operational Emissions

The Bell Road at I-80 Interchange Project is exempt from federal air quality conformity analysis requirements per 40 CFR § 93.126 (Exempt Projects), The project qualifies as an exempt safety project as it corrects, improves, or eliminates a hazardous location or feature; has shoulder improvements; includes traffic control devices and operating assistance other than signalization projects; adds medians; and has lighting improvements. The project also qualifies as an exempt air quality project as it includes bicycle and pedestrian facilities.

A project would result in a considerable contribution to a cumulative impact to air quality if it results in a net increase in long-term operational emission of ROG or NOx that exceeded 55 lbs/day or emissions of PM10 that exceeded 82 lbs/day. As shown above in Table 1, the project would not result in emissions exceeding PCAPCD thresholds.

The Placer County Transportation Planning Agency (PCTPA) guides transportation development in the project area. Intersection improvements at the proposed project site were identified in the Placer County 2040 Final Regional Transportation Plan (RTP) as a System Management, Operations, and ITS project.

The project will improve overall operations, circulation, and accessibility for drivers and cyclists at the existing Bell Road at I-80 Interchange. The project will not increase the vehicle capacity of the roadway. Because the project would not increase the number of travel lanes at the project intersections, no increase in vehicle miles traveled (VMT) would occur as result of project implementation.

Projects that improve mobility, reduce idling, and construct pedestrian and bicycle facilities are known to reduce area emissions during operations by improving circulation and encouraging

non-motorized trips. Operational emissions would be negligible, compared to baseline, as the project does not propose any new structures or uses that would increase trip generation or VMT.

Conclusion

The PCTPA guides transportation development in the project area. Intersection improvements at the proposed project site were identified in the Placer County 2040 Final Regional Transportation Plan (RTP) as a System Management, Operations, and ITS project.

While the proposed project will result in emissions during construction, these construction emissions are below applicable thresholds adopted by the APCD. The project is required to comply with PCAPCD Rule 228, Fugitive Dust, which establishes the minimum dust mitigation and control requirements along with the standards to be met from the activities that generate fugitive dust. Rule 228's minimum dust mitigation and control requirements must be used for all grading and construction activities.

As stated previously, it is anticipated that the project will not result in an increase in operational VMT and emissions. This was further analyzed by a PCTPA VMT assessment for projects on the Placer Sacramento Action Plan, including the Bell Road Roundabouts where PCTPA found that the Bell Roads Roundabout project resulted in a reduction of VMT. The project will improve overall operations, circulation, and accessibility for drivers and cyclists at the existing Bell Road at I-80 Interchange. The project will not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational emissions.

The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions, and would not result in additional criteria pollutants that would exceed thresholds set by the PCAPCD. Therefore, impacts would be ***less than significant***.

Response c):

Pollutant concentrations

Sensitive receptors are children, elderly, asthmatics and others whose are at a heightened risk of negative health outcomes due to exposure to air pollution. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine (California Health and Safety Code § 42705.5(a)(5)). The nearest location of sensitive receptors includes residences located approximately 75 feet north of the project Environmental Study Area. However, the distance between sensitive receptors and the edge of travel lanes would not substantially change between the No Build Alternative and Build Alternative.

As described in the Transportation Operations Analysis Report (TOAR) prepared for the Project (included in Appendix C), the Project corrects the existing deficiencies at the study area intersections at the Bell Road/I- 80 interchange and will operate at acceptable LOS conditions upon opening in Year 2025 and maintain similar acceptable conditions through the Year 2045. As such additional idling times and pollution concentrations would not be anticipated. While the proposed project will result in emissions during construction, as described previously construction emissions are below applicable thresholds adopted by the APCD and the project is required to comply with Placer County APCD Rules for Fugitive Dust for all grading and construction activities. Therefore, the proposed project would have a ***less than significant*** impact relative to this topic.

Response d):

The proposed project would not generate objectionable odors. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration, and generally limited within the project area. Dust and construction emission reduction BMPs required by the APCD would minimize the impact on ambient odors of the natural area.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g., auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plants. The project does not propose any new uses that would create odors, and upon project completion the operational phase would not generate objectionable odors. Therefore, impacts would be considered ***less than significant***.

IV. BIOLOGICAL RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Responses to Checklist Questions

Response a):

A Natural Environment Study (NES) (*minimal impacts*) was completed for the project in September 2020 by De Novo Planning Group. The Biological Study Area (BSA) included the Project Impact Area (PIA) and approximately 100-foot buffer beyond the County ROW. The BSA is mostly composed of the I-80, including the Bell Road overcrossing and on- and off- ramps. The BSA also includes Bell Road, which intersects with the I-80 and two frontage roads—Musso Road and Bowman Road. The Natural Environment Study is included as Appendix D.

There are numerous special-status wildlife and plant species known to occur within the region. A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation and Official Species List was completed.

Within a nine-quad search, the CNDDB lists 20 animal species that are federal or state listed as Endangered, Threatened, Fully Protected, Candidate, or Species of Special Concern. None of these species are documented within the BSA.

The USFWS Official Species List for the project identifies two additional federal listed species as potentially occurring in the region. In addition, the NMFS lists two federal listed species, a critical habitat, and an essential fish habitat as occurring within a one quad search. One of those listed was included in the CNDDB search.

Within a nine-quad search, the CNDDB lists five plant species that are federal or state listed as Endangered, Threatened, or Rare, and an additional seven plant species that are not federal or state listed but have a CNPS rare plant rank of 1B.2, 1B.3, or 2B.3.

Within a nine-quad search, the CNPS Inventory of Rare and Endangered Plants lists fourteen species with a CNPS rare plant rank of 1B.2, 1B.3., or 2B.3. Of these, twelve are the same plant species in the CNDDB list, and two species were not listed in the CNDDB.

The CNDDB search, USFWS Official Species List, and CNPS Inventory search are each provided in the Appendix. In total, there are 20 special status animal species and fourteen special status plant species that occur in the vicinity of the project. Table 2 below provides each of the species identified in the database searches.

Table 2: Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Animals					
American peregrine falcon	*Falco peregrinus anatum*	-/-/FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	A	Federal: No effect State: Will not result in take. Species is known within the region, but essential cliff nesting habitat is absent in or near the BSA. This species is highly mobile and it is possible that this species traverse through the BSA during foraging. The BSA does not contain high quality foraging opportunities for this species. There was no evidence of active nesting or residual nests. Preconstruction surveys for nesting birds in the vicinity of the BSA is necessary prior to construction.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
bald eagle	*Haliaeetus leucocephalus*	-/SE/FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	A	Federal: No effect State: Will not result in take. Species is known within the region, but essential foraging habitat is not present within the immediate vicinity of the BSA. This species is highly mobile and it is possible that this species traverse through the BSA at times. There was no evidence of active nesting or residual nests, however, it is possible that this species establishes a nest in the vicinity of the BSA given the density of large trees. Preconstruction surveys for nesting birds in the vicinity of the BSA is necessary prior to construction.
bank swallow	*Riparia riparia*	-/ST/-	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	A	Federal: N/A State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
California black rail	*Laterallus jamaicensis coturniculus*	-/ST/FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	A	Federal: N/A State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
California red-legged frog	*Rana draytonii*	FT/-/SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	A	Federal: No Effect State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
chinook salmon - Central Valley spring-run ESU	*Oncorhynchus tshawytscha*	FT/ST/-	Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults. Federal listing refers to populations spawning in Sacramento River and tributaries.	A	Federal: No Effect State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. It is noted that the BSA is within Coon Creek Watershed, which contains potential habitat for this species. The closest tributary to Coon Creek is Dry Creek approximately 0.5 miles to the north. There is no habitat for this species in the BSA. Storm water pollution prevention measures are necessary to prevent downstream water quality impacts on this species.
coast horned lizard	*Phrynosoma blainvillii*	-/-/SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	A	Federal: No Effect State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Delta smelt	*Hypomesus transpacificus*	FT/SE/-	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	A	Federal: No Effect State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
fisher - West Coast DPS	*Pekania pennanti*	-/ST/SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	A	Federal: N/A State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
foothill yellow-legged frog	*Rana boylii*	-/SE/SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	A	Federal: N/A State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
pallid bat	*Antrozous pallidus*	-/-/SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in rock outcrops, hollow trees, abandoned mines, barns, and attics.	A	Federal: N/A State: Will not result in take. Species is known within the region and is highly mobile. It is possible that this species traverse through the BSA at times. There was no evidence of roosts, however, it is possible that this species establishes a roost within the BSA in the future. Additionally, it is possible that there are roosts in the vicinity given the quality habitat throughout the region. Preconstruction surveys for active roosts within the BSA is necessary prior to construction.
purple martin	*Progne subis*	-/-/SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also, in human-made structures. Nest often located in tall, isolated tree/snag.	A	Federal: N/A State: Will not result in take. Species is known within the region and is highly mobile. It is possible that this species traverse through the BSA at times. There was no evidence of active nesting or residual nests, however, it is possible that this species establishes a nest in the vicinity of the BSA given the density of trees. Preconstruction surveys for nesting birds in the vicinity of the BSA is necessary prior to construction.
steelhead - Central Valley DPS	*Oncorhynchus mykiss*	FT/-/-	Populations in the Sacramento and San Joaquin Rivers and their tributaries. Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3-inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.	A	Federal: No Effect State: N/A Appropriate habitat is not present on or adjacent to the biological study area. It is noted that the BSA is within Coon Creek Watershed, which contains potential habitat for this species. The closest tributary to Coon Creek is Dry Creek approximately 0.5 miles to the north. There is no habitat for this species in the BSA. Storm water pollution prevention measures are necessary to prevent downstream water quality impacts on this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Townsend's big-eared bat	*Corynorhinus townsendii*	-/-/SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	A	Federal: N/A State: Will not result in take. Species is known within the region and is highly mobile. It is possible that this species traverse through the BSA at times. There was no evidence of roosts, however, it is possible that this species establishes a roost within the BSA in the future. Additionally, it is possible that there are roosts in the vicinity given the quality habitat throughout the region. Preconstruction surveys for active roosts within the BSA is necessary prior to construction.
tricolored blackbird	*Agelaius tricolor*	-/ST/SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	A	Federal: N/A State: Will not result in take. Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT/-/-	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	A	Federal: No Effect State: N/A Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
vernal pool fairy shrimp	*Branchinecta lynchi*	FT/-/-	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	A	Federal: No Effect State: N/A Appropriate habitat is not present on or adjacent to the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
western bumble bee	*Bombus occidentalis*	-/SC/-	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease. They live in a variety of habitats, including flowering grasslands, savannas and alpine meadows.	HP	Federal: N/A State: Will not result in take. This species is highly mobile and may be found within the BSA at times.
western pond turtle	*Emys marmorata*	-/-/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	A	Federal: NA State: Will not result in take. This species predominately occurs in aquatic areas, which are absent from the BSA. It is noted that this species has a seasonal migration and it is not uncommon to find this species nesting in upland areas. However, the BSA does not have any quality upland nesting areas for this species.
white-tailed kite	*Elanus leucurus*	-/-/FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	A	Federal: NA State: Will not result in take. Species is known within the region and is highly mobile. It is possible that this species traverse through the BSA at times. There was no evidence of active nesting or residual nests, however, it is possible that this species establishes a nest in the vicinity of the BSA given the density of large trees. Preconstruction surveys for nesting birds in the vicinity of the BSA is necessary prior to construction.
Plants					
big-scale balsamroot	*Balsamorhiza macrolepis*	-/-/1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1465 m. March to June	A	Federal: N/A State: Will not result in take. Serpentine soil conditions not present within the biological study area. No evidence of this species was observed in the grassland area during field surveys, and no past records were identified in the database records.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	-/SE/1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 4-2410 m April to August	A	Federal: N/A State: Will not result in take. Appropriate mesic conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
chaparral sedge	*Carex xerophila*	-/-/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Serpentinite, gabbroic. 275-770 m. March to June	A	Federal: N/A State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
El Dorado bedstraw	*Galium californicum ssp. sierrae*	FE/SR/1B.2	Cismontane woodland, chaparral, lower montane coniferous forest. In pine-oak woodland or chaparral. Restricted to gabbroic or serpentine soils. 130-595 m. May to June	A	Federal: No Effect State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
El Dorado County mule ears	*Wyethia reticulata*	-/-/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, clay or gabbroic substrate. April to August	A	Federal: N/A State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Jepson's coyote-thistle	*Eryngium jepsonii*	-/-/1B.2	Vernal pools, valley and foothill grassland. Clay. 3-305 m. April to August	A	Federal: N/A State: Will not result in take. Appropriate mesic conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Jepson's onion	*Allium jepsonii*	-/-/1B.2	Chapparal, cismontane woodland, lower montane coniferous forest. On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. On slopes and flats; usually in an open area. 355-1130 m. April to August	A	Federal: N/A State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
					records were identified in the database records.
Layne's ragwort	*Packera layneae*	FT/SR/1B.2	Chaparral, cismontane woodland. Ultramafic soil (serpentine or gabbro); occasionally along streams. 205-1060 m. April to August	A	Federal: No Effect State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Oval-leaved viburnum	*Viburnum ellipticum*	-/-/2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400 m. May to June	A	Federal: N/A State: Will not result in take. Appropriate habitat conditions exist in the vicinity, but not within the BSA. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Parry's horkelia	*Horkelia parryi*	-/-/1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; especially known from the Ione formation in Amador County. 85-1115 m. April to September	A	Federal: N/A State: Will not result in take. Appropriate habitat conditions exist in the vicinity, but not within the BSA. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Pine Hill ceanothus	*Ceanothus roderickii*	FE/SR/1B.1	Chaparral, cismontane woodland. Gabbroic or serpentine soils; often in "historically disturbed" areas with an ensemble of other rare plants. 260-630 m. April to June	A	Federal: No Effect State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Red Hills soaproot	*Chlorogalum grandiflorum*	-/-/1B.2	Cismontane woodland, chaparral, lower montane coniferous forest. Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites. 265-1695 m. May to June	A	Federal: N/A State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
					records were identified in the database records.
Sierra blue grass	*Poa sierrae*	-/-/1B.3	Lower montane coniferous forest. Shady, moist, rocky slopes. Often in canyons. 365-1915 m. April to June	A	Federal: N/A State: Will not result in take. Appropriate habitat conditions exist in the vicinity, but not within the BSA. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Stebbins' morning-glory	*Calystegia stebbinsii*	FE/SE/1B.1	Chaparral, cismontane woodland. On red clay soils of the Pine Hill formation; gabbro or serpentine; open areas. 300-705 m. April to June	A	Federal: No Effect State: Will not result in take. Appropriate soil conditions is not present within the biological study area. No evidence of this species was observed during field surveys, and no past records were identified in the database records.
Critical Habitat					
CCV Steelhead Critical Habitat				A	Federal: No Effect State: N/A No fish bearing waters within the BSA.
Essential Fish Habitat					
Chinook Salmon EFH				A	Federal: No Effect State: N/A No fish bearing waters within the BSA.

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS) 1B = rare, threatened, or endangered in California and elsewhere, 2 = rare, threatened, or endangered in California, but more common elsewhere, .1 = seriously endangered in California (over 80% of occurrences threatened-high degree and immediacy of threat), .2 = fairly endangered in California (20-80% occurrences threatened), and .3 = not very endangered in California (<20% of occurrences threatened).

Special Status Plant Species

There are fourteen special-status plant that were identified in the records search for the regional vicinity. These include: big-scale balsamroot (*Balsamorhiza macrolepis*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), chaparral sedge (*Carex xerophila*), El Dorado bedstraw (*Galium californicum ssp. Sierrae*), El Dorado County mule ears (*Wyethia reticulata*), Jepson's coyote-thistle (*Eryngium jepsonii*), Jepson's onion (*Allium jepsonii*), Layne's ragwort (*Packera layneae*), Oval-leaved viburnum (*Viburnum ellipticum*), Parry's horkelia (*Horkelia parryi*), Pine Hill ceanothus (*Ceanothus roderickii*), Red Hills soaproot (*Chlorogalum grandiflorum*), Sierra blue grass (*Poa sierrae*), Stebbins' morning-glory (*Calystegia stebbinsii*). The plant surveys were performed during the blooming period for the plants, and none were observed. Each of these species was deemed to be Absent from the BSA due to a combination of no observations during the focused plant surveys and the absence of appropriate habitat within the BSA. Lastly, there are no records of these species being documented within the BSA.

Special Status Animal Species

There are twenty special-status animals that were identified in the records search for the regional vicinity. These include: American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), bank swallow (*Riparia riparia*), California black rail (*Laterallus jamaicensis coturniculus*), California red-legged frog (*Rana draytonii*), chinook salmon - Central Valley spring-run ESU (*Oncorhynchus tshawytscha*), coast horned lizard (*Phrynosoma blainvillii*), Delta smelt (*Hypomesus transpacificus*), fisher - West Coast DPS (*Pekania pennant*), foothill yellow-legged frog (*Rana boylii*), pallid bat (*Antrozous pallidus*), purple martin (*Progne subis*), steelhead - Central Valley DPS (*Oncorhynchus mykiss*), Townsend's big-eared bat (*Corynorhinus townsendii*), tricolored blackbird (*Agelaius tricolor*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool fairy shrimp (*Branchinecta lynchi*), western bumble bee (*Bombus occidentalis*), western pond turtle (*Emys marmorata*), white-tailed kite (*Elanus leucurus*).

With the exception of the western bumble bee, which is discussed below in more detail, each of these species was deemed to be Absent from the BSA due to the absence of appropriate habitat, combined with the lack of any records of these species being present on or in the vicinity. It is noted that given the available quality habitat in the vicinity of the BSA for special status birds, and the quality roosting habitat for bats, combined with the high mobility of these species, it is possible for these species to traverse the BSA at times. It is also possible that nests and/or roosts for these species could be established under the Bell Road at I-80 overcrossing within the BSA, or in other areas that are proximate to the BSA. As such, special status birds and bats are discussed below in more detail.

Raptors

Suitable nesting habitat for common raptor species, in addition to some special-status raptor species (bald eagle, while tailed kite), is present in the Montane Hardwood-Conifer, Montane Hardwood, Blue Oak-Foothill Pine, Valley Oak Woodland, and Valley Foothill Riparian habitats located in the vicinity of the BSA. Common raptor species with potential to nest within the BSA include, but would not be limited to, red-tailed hawk, red-shouldered hawk, Cooper's hawk, and great horned owl. Other less common raptor species that could be found nesting in these areas include bald eagle, white-tailed kite, sharp-shinned hawk, northern goshawk, and osprey.

Appropriate nesting habitat for these species is not present within the BSA. From the BSA, trees within the adjacent habitat were surveyed with optics to look for evidence of nesting. There was no evidence of active or remnant nests located in the immediate vicinity. It is noted that the absence of nests during the survey does not preclude a raptor from establishing a nest in these areas in a future nesting season.

The proposed project will not directly impact suitable nesting habitat for raptor species. Implementation of Avoidance and Minimization Measures will ensure that the proposed project will not indirectly impact nesting raptors or their young. There are no critical habitats within the project limits.

Migratory Birds

The project is within the Pacific Flyway, which is a migratory travel route for millions of birds, and more than 350 species. Migratory birds travel this avian flyway each year from the Bering Strait to South America. Many of the birds travel from the north to overwinter in California, including the Central Valley region which is just west of the BSA. The birds overwintering arrive as early as August. Other birds travel south to overwinter, and arrive back in California as early as February to nest/breed.

The timing of the survey coincided with those migratory birds that breed in California, and did not coincide with wintering birds. One migratory bird that could be expected to nest in the BSA is the cliff swallow. They are very common nesters throughout the Central Valley and Sierra foothills, and are typically found nesting under bridges/overcrossings. Nesting cliff swallows were not observed within the project limits nesting under the Bell Road at I-80 overcrossing; however, it is well known that this species can move around to different nesting sites over five-year periods to avoid parasite infestations. As such, given the presence of the overcrossing, combined with bridges/overcrossings being the most common cliff swallow nesting grounds, future nesting by this species is possible within the BSA. The nesting season is generally February 1 - September 30.

The BSA provides very limited nesting opportunities for other migratory birds, although it is noted that there is high quality nesting habitat for birds in the adjacent wooded areas. The wooded habitat in the vicinity is not within the BSA, and was not surveyed on foot given private property access restrictions. It would be expected that a variety of birds occupy, and nest in the adjacent habitats. There was no evidence of active or remnant nests located in the immediate vicinity, although observations of smaller bird nests are more difficult using optics from a distance. It is noted that the absence of nests during the survey does not preclude a bird from establishing a nest in these areas in a future nesting season.

The Bell Road at I-80 overcrossing provides nesting habitat for cliff swallows. There were no observable remnants of cliff swallow nesting, although that does not preclude this species from establishing nests in the future. The nesting season is generally February 1 - September 30. The project could impact this species by implementation of the project including grading and related construction activities. However, with the implementation of mitigation measures noted below, the proposed project would have a ***less than significant*** impact on cliff swallows and other migratory birds if they were to become established.

Bats

There are a variety of bat species that are known throughout the region including the Mexican free-tailed, big brown bats, little brown bat, pallid bat, red bat, Townsend's big-eared bat, and Yuma myotis among others. The mobility of these mammals is remarkable and allows them to occupy a wide range of habitats and to migrate seasonally. They are found from the lowest elevations in the Central Valley to the high elevations of the Sierra Nevada. They roost in rock crevices and caves, under loose bark, in or under bridges, in attics and tree cavities, and within buildings and other structures.

The maternal roosting period is generally in early spring and extends through the summer (generally April through August). Non-maternal roosting sites can vary between day and night. Some bat species are migratory, and some hibernate.

No bats were observed within the BSA under the Bell Road at I-80 overcrossing. Surveying of adjacent areas outside the BSA is not practical without access.

Bats will commonly utilize the crevices in bridges and in trees for roosting. While no bats, or bat sign (i.e., guano), was observed under the Bell Road at I-80 overcrossing, or any of the trees within the project area, it would not be entirely uncommon for bats to establish a roost under the overcrossing or in a tree at a future time. When work is performed during the maternal roosting season (April-August), preconstruction surveys are necessary. With the implementation of mitigation measures presented below, the impact would be ***less than significant***.

Western Bumble Bee (*Bombus occidentalis*)

Bumble bees, as a whole, are threatened by a number of factors including agricultural intensification, habitat loss and degradation, pesticide and herbicide use, pathogens from managed pollinators, competition with non-native bees, climate change, genetic factors, and loss of host species. It is anticipated that without protective measures, the western bumble bee is likely to go extinct in California, which has prompted the CDFW to list the species as a Candidate.

Distribution of the western bumble bee was historically broadly distributed across the west coast of North America from southern British Columbia to central California, east through Alberta and western South Dakota, and south to Arizona and New Mexico. In California, it has been documented in Alameda, Alpine, Butte, Calaveras, Contra Costa, Del Norte, El Dorado, Fresno, Humboldt, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sen Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Tehama, Trinity, Tulare, Yolo, and Yuba counties.

Identification: The western bumble bee is most easily distinguished from other Bombus species based on hair coloration. Note, however, that coloration in this species can be highly variable, and eight female and seven male color forms have been described. There are two prominent color forms of this species most likely to be encountered in California. Those found in the mountains ("occidentalis" form) are likely to have bright white coloration on the posterior end of the abdomen; this character is unusual and obvious. The "occidentalis" form (without any yellow on T1-4) is found throughout in the eastern part of the state in the Sierra-Cascade Range from near Yosemite to Oregon and west along the northern tier of counties into Humboldt County.

> Queens: The queen is 20 to 21 mm in length. Their hair is entirely black on the head sometimes with a minority of yellow or gray hairs mixed in above the antennae. Their hair is yellow on the front part of the thorax (scutum), usually with black, or a minority of yellow hairs at the back of the thorax (scutellum). The majority of the hairs between and below the wings are black. On the abdomen, the first two tergal (dorsal plate) segments (T1-T2) are black. If T3 is entirely yellow, then T4 is black, T5 white. If T3 is black, or with a minority of yellow, T4 and T5 are white.
>
> Workers: The worker is 9 to 15 mm in length. Their hair is entirely black on the head sometimes with a minority of yellow or grayish hairs mixed in above the antennae. Their hair is yellow on the front part of the thorax (scutum), usually with black, or a minority of yellow hairs at the back of the thorax (scutellum). The majority of the hairs between and below the wings are black. On the abdomen, the first tergal (T1-dorsal plate) segment is black. T2 has at least some black on it centrally and anteriorly. If T3 is entirely yellow, the white hairs on T4 (if applicable) and T5 seen in queens will be replaced with yellowish orange hairs. If T3 with at most a minority of yellow hairs, T4 and T5 are white.

Males: The male is 13 to 17 mm in length. The hair on the head is pale yellowish on the front of the face. The top of the head has pale yellowish hairs medially, with some black hairs, especially laterally. The hair on the front of the thorax is pale yellowish. The hair on T1 is black with at least some black centrally and anteriorly on T2. If T3 is black the basal part of the fourth abdominal segment is black, with the remainder, as well as segments five to seven, whitish – although sometimes a yellowish orange. If T3 is entirely yellow, T5 is black basally, and the remainder, as well as T6-T7 are yellowish orange.

Habitat Requirements: Meadows and grasslands with abundant floral resources are the appropriate habitat for this species. While this species was historically known throughout the mountains and northern coast of California, it is now largely confined to high elevation sites and a small handful of records on the northern California coast.

Nest Sites: Reports of nests are primarily in underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees, although a few nests have been reported from above-ground locations such as in logs among railroad ties. Thus, nesting sites may be limited by rodent abundance. Nest tunnels have been reported to be up to 2.1 m long for this species and the nests may be lined with grass or bird feathers. Colonies can contain as many as 1,685 workers and produce up to 360 new queens; this colony size is considered large relative to many other species of bumble bees.

Floral Resources: Bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants. This species has a very short tongue, and thus is best suited to forage at open flowers with short corollas and has also been documented 'nectar robbing' – biting through the corolla tube and drinking nectar through the hole without contacting the anthers, or stigma of the plant – several species of flowers with longer corolla tubes. Bumble bees require plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late November. The plant genera most commonly associated with observations or collections from California include Cirsium, Erigonum, Solidago, "Aster", Ceanothus, Centaurea, and Penstemon. These floral associations do not necessarily represent preference for these plants over other flowering plants, but rather may represent the abundance of these flowers in the landscape.

Overwintering Sites: Very little is known about the hibernacula, or overwintering sites utilized by most bumble bees, although it has been reported that hibernacula can be beneath trees and in mounds of soil.

Phenology: The flight period for queens in California is from early February to late November, peaking in late June and late September. The flight period for workers and

males in California is from early April to early November; worker abundance peaks in early August, and male abundance peaks in early September.

There are no recorded sites for western bumble bee within the regional vicinity. The site survey did not reveal any nest sites within the BSA. There are floral resources within the BSA along the existing roadways, which provides some foraging habitat for any bumble bees that may live in the region. No western bumble bees were observed within the BSA, however, given this species high mobility and the presence of floral resources it is possible that this species forages within the BSA at times.

Due to the inherent vulnerability of many bumble bee species and importance of supporting wild bee populations for pollination services, the CDFW petition to list this species included five general conservation practices:

1. Identify, protect, enhance, and restore natural high-quality habitats to include suitable forage, nesting and overwintering sites.

2. Promote farming practices that increase of nitrogen-fixing fallow (legumes) and other pollinator-friendly plants along field margins.

3. Restrict pesticide use on or near each species' habitat, particularly while treated plants are in flower.

4. Minimize exposure of wild bees to diseases transferred from managed bees.

5. Avoid honey bee introduction to high-quality native bee habitat.

The BSA is not considered high quality habitat for this species. For example, there are no meadows or grasslands with abundant floral resources; however, there are linear strips of grassland habitat with floral resources along the roadways within the BSA. These areas are low-quality fragments of habitat and project construction will require some disturbance to these grassland strips. Once the construction is completed, however, the project will include a replanting of grassland vegetation in all areas disturbed. The replanting will require a seed mixture of regionally appropriate, native plants, of common native species found within the project habitats. These are the same species that are most commonly-currently successful, including grasses, forbs, and wildflowers.

The BSA does not include any farming, pesticide use, or introduction of managed bees (i.e., honey bees). These conservation practices are not applicable to the proposed project.

There are three things that bumble bees need in the landscape to thrive: flowers on which to forage, somewhere to nest, and a place to overwinter. Each of these habitat requirements is vital

for different phases of the bees' annual life cycle. Implementation of avoidance and minimization measure will minimize project effects on the western bumble bee.

Conclusion

As described in the NES prepared for the proposed Project, Measure BIO-1, BIO-2, and BIO-3 would reduce impacts to migratory birds, bats, raptors and the Western Bumblebee from project activities. With incorporation of the below mitigation measures, impacts would be reduced to a **less than significant** level relative to this topic.

Mitigation Measures:

Mitigation Measure BIO 1. *If project activities must occur during the nesting season (February 1 - September 30), a qualified biologist will conduct pre-construction surveys for active raptor and migratory bird nests within 3 days prior to the onset of these activities. For migratory birds and raptors, the survey area will include the biological study area (BSA), as well as adjacent habitat that is visible with optics from the BSA. If no active nests are found within the survey area, no further mitigation is required.*

- *Should any active nests be discovered within the biological survey area (BSA), the biologist will determine the appropriate construction setback distances in coordination with CDFW and/or the biology of the affected species. Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged. If active nests are discovered, the applicant shall notify Placer County and CDFW.*

Mitigation Measure BIO 2: *To avoid effects to bats, a qualified biologist will conduct pre-construction surveys for bats within the crevices of the overcrossing structure within 7 days prior to the onset of construction activities. If no evidence of bats are found under the Bell Road at I-80 overcrossing, no further mitigation is required.*

- *If it is determined that bats are using the overcrossing structure, it should be determined by the biologist whether the use is for maternal roosting (generally April – August).*
    - *If it is a non-maternal roost site:*
        - *If the final design doesn't call for any disturbance to the overcrossing, then nothing further would be necessary.*
        - *If any disturbance to the overcrossing is necessary, exclusionary devices will be installed so the bats cannot use the overcrossing for roosting during construction and will relocate. These devices should only be installed during the non-maternal and non-mating season (generally September – February). After the exclusionary devices have been installed, the contractor must wait seven days before work can commence. By waiting the seven days, the bats can exit the overcrossing and relocate. Installed exclusionary devices are designed to allow bats to exit, but there is not an ability to re-enter. Once these devices have*

been installed, they must be maintained by the contractor for the duration of construction and kept in good working order. Work on the overcrossing deck can occur anytime without work window restrictions.

- *If it is a maternal roost site:*
  - *If the final design doesn't call for any disturbance to the overcrossing, the applicant shall retain a bat specialist to conduct construction worker awareness, establish orange fencing to keep activities away from the roost, and continue with monitoring to ensure that there is no disturbance that could jeopardize the roost.*
  - *If any disturbance to the overcrossing is necessary, construction must be performed outside of the maternal roosting season which occurs April through August*

Mitigation Measure BIO 3. *Replanting/Erosion Control: All areas disturbed during construction activities shall be revegetated with a selection of regionally appropriate native species of grasses, forbs, and wildflowers for erosion control. Plant genera to consider include Ceanothus.*

Response b): The records search and onsite surveys didn't identify sensitive natural communities or riparian habitat on the project site. Implementation of the proposed project will have a ***no impact*** on riparian habitat and sensitive natural communities.

Response c):

A wetland is an area that is 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. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are defined by regulatory agencies as having special vegetation, soil, and hydrology characteristics. Hydrology, or water inundation, is a catalyst for the formation of wetlands. Frequent inundation and low oxygen cause chemical changes to the soil properties resulting in what is known as hydric soils. The prevalent vegetation in wetland communities consists of hydrophytic plants, which are adapted to areas that are frequently inundated with water. Hydrophytic plant species have the ability to grow, effectively compete, reproduce, and persist in low oxygen soil conditions. No wetlands or wetland features were observed during the onsite surveys conducted on May 30, 2019.

No wetlands or waters of the US/State are located on the project site. Therefore, implementation of the proposed project will have ***no impact*** on wetland or water features.

Response d):

One migratory bird that could be expected to nest in the BSA is the cliff swallow. They are very common nesters throughout the Central Valley and Sierra foothills, and are typically found nesting under bridges. Nesting cliff swallows were not observed within the project limits nesting under the Bell Road at I-80 overcrossing; however, it is well known that this species can move

around to different nesting sites over five-year periods to avoid parasite infestations. As such, given the presence of the Bell Road at I-80 overcrossing, combined with bridges/overcrossings being the most common cliff swallow nesting grounds, future nesting by this species is possible within the BSA. Implementation of the Avoidance and Minimization Measures will ensure that the proposed project will not adversely impact nesting cliff swallows or their young.

The Project area provides very limited nesting opportunities for other migratory birds, although it is noted that there is high quality nesting habitat for birds in the vicinity in the wooded areas. The wooded habitat in the vicinity is not within the BSA, but it would be expected that a variety of birds occupy, and nest in the adjacent habitats. Implementation of Mitigation Measure BIO-1 will ensure that the proposed project will not adversely impact nesting migratory birds or their young.

The Project site is located in a rural area made up of lands that include ROW in a disturbed area, and the scope and footprint of the Project are small compared to the surrounding available habitat. The Project does not substantially increase the footprint of I-80, Bell Road, Musso Road, or Bowman Road, and as a result it does not significantly change existing wildlife movement corridors. The project would not result in any impacts to Federal fisheries or essential fish habitat because there is no suitable habitat for any listed or protected fish species within the project site. Implementation of the proposed project would have a ***less than significant with mitigation incorporation*** impact related to this environmental topic.

Response e):

Placer County has adopted a Woodland Conservation Ordinance (Chapter 19, Article 19.50 Placer County Code). The ordinance applies to all native, landmark trees, and riparian zone trees in Placer County and to all projects where discretionary permit approvals are required by the County. Protected trees include all oaks and native trees greater than 6″ in circumference (measured 4.5′ above ground) and trees of any species with a landmark tree designation.

Trees located in areas along the edge of the construction zone would be trimmed whenever possible. It is anticipated that no removal of trees of significance would be required. The project will obtain a Tree Permit from Placer County Community Development Resource Agency to mitigate tree removal for the project, if needed.

The project is not inconsistent with these policies. As demonstrated above and throughout this Initial Study, the project would be subject to all federal, State and regional regulations for habitat and species protection. The project is required to comply with Chapter 19, Article 19.50 Placer County Code regarding tree protection and removal standards during construction.

The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no such plans currently exist for the project area and is outside the Placer County Conservation Program limits. As part of project design, the project would remove some vegetation and would revegetate disturbed areas with native species to offset the losses due to construction. The project would be subject to the revegetation requirements of Placer County. Therefore, this impact would be ***less than significant***.

V. CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Background

A Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) was prepared for the proposed project. A field survey for the Area of Potential Effects (APE) was completed by Peak & Associates, Inc. in March 2020. Records of previously recorded cultural resources and cultural resource investigations were examined by the North Central California Information Center of the California Historical Resources Information System. In the APE, there are no previously recorded archeological resources, however the search identified 26 recorded cultural resources within one-half mile of the project.

Consultation: A request was sent to the Native American Heritage Commission (NAHC) on February 11, 2020, requesting a check of the Sacred Lands files. NAHC replied on February 13, 2020 stating, "Sacred sites have been identified in the project area provided. Please contact the United Auburn Indian Community of the Auburn Rancheria for more information about potential sacred sites and tribal cultural resources within your APE."

Letters with a USGS map and the large scale aerial map with the project APE shown were sent via email on March 13, 2020 to: Gene Whitehouse, Chairperson, United Auburn Community of Auburn Rancheria (UAIC); Grayson Coney, Cultural Director, Tsi-Akim Maidu; Regina Cuellar, Chairperson, Shingle Springs Band of Miwok Indians; and, Clyde Prout, Chairperson, Colfax-Todds Valley Consolidated Tribe, all groups later identified during the Sacred Lands File search for the project by the NAHC.

Pamela Cubbler, Treasurer, Colfax-Todds Valley Consolidated Tribe responded on March 13, 2020 with a message left on voicemail stating she "had several questions about the project" and would like a return call. Peak & Associates left a message with Ms. Cubbler's voicemail on March 16, 2020 asking her to return the call when convenient. Peak & Associates called again March 24, 2020 and was able to speak to Ms. Cubbler who said that there were many known sites in the area, including a drainage feature that was present prior to the construction of Interstate 80. She indicated that she would like a site visit and to be present as a monitor during construction.

On March 23, 2020 a second round of communication was sent to the three remaining groups on the NAHC contact list who had not yet responded requesting that if they had any information or wished to comment, to please do so before April 1, 2020.

The Placer County Historical Society was sent a letter on March 24, 2020 requesting information about historical resources within the project APE. As of March 31, 2020, no reply had been received.

On March 26, 2020, Anna Starkey, Tribal Historic Preservation Office, United Auburn Indian Community of the Auburn Rancheria (UAIC) responded by email requesting that workers awareness training program be instituted prior to construction. She provided no information about potential sacred sites and tribal cultural resources within the APE. Ms. Starkey also asked for the contact person for the lead agency, photographs of the site visit, copies of any cultural resource inventory reports and confirmation that their comments and recommendation would be included in the report.

In September 2020, AB-52 consultations were conducted by the County with three tribes (United Auburn Indian Community (UAIC), Ione Band of Miwok Indians, and Washoe Tribe of Nevada & California). UAIC responded with similar requests to the outreach conducted in March 2020 since the Tribal Historic Preservation Department identified a tribal cultural resource in proximity to the proposed project area and that they would like to provide the County with the Tribes preferred mitigation measures. The following measures were requested: Cultural Awareness Training, Post-ground disturbance site visit and Unanticipated Discoveries.

Responses to Checklist Questions

Response a):

A record search was conducted through the North Central California Information Center of the California Historical Resources Information System on February 18, 2020 for the project area and a one-half- mile radius around the project area. The record search included a review of the National Register of Historic Places, the California Register of Historical Resources, California Inventory of Historic Resources, California Historical Landmarks, California Points of Historical Interest, and the Historic Property file.

In the APE, there are no previously recorded archeological resources. There are 26 recorded cultural resources located within a one-half mile radius of the project.

No historic properties were identified during the field inspection. However, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical resource. Implementation of Mitigation Measure CUL-1 would ensure steps would be taken to reduce impacts to historical resources in the event that they are discovered during construction. Therefore, with implementation of mitigation measures this potentially significant impact would be reduced to a ***less than significant*** level regarding this topic.

Mitigation Measures:

> ***Mitigation Measure CUL-1:*** *If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*
>
> *Work cannot continue at the discovery site 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; or 3) not a significant Public Trust Resource.*
>
> *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, shall*

be retained at the Applicant's expense. This measure shall be included on the Notes sheet of the project's Improvement Plans.

Response b)

The field and record surveys did not reveal a significant archeological resource or site on the project site. However, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown archaeological resource. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level regarding this topic.

Mitigation Measures:

Mitigation Measure: *Implement Mitigation Measure CUL-1.*

Response c):

Indications are that humans have occupied Placer County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal burial sites. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during project implementation.

While no human remains were indicated through the records search, or found during field surveys, implementation of the following mitigation measure would ensure that all construction activities that inadvertently discover human remains implement state required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of the following measure would reduce this potential impact to a ***less than significant*** level.

Mitigation Measures:

Mitigation Measure CUL-2*: If human remains are discovered during the course of construction, work shall be halted at the site and any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*

- *The coroner will contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual (Most Likely Descendant (MLD)). The MLD will make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
- *The Native American monitor, and an archaeologist, if recommended by the Native American monitor, shall rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
    - *The Native American Heritage Commission is unable to identify a descendant.*
    - *The descendant identified fails to make a recommendation.*

- *This measure shall be included on the Notes sheet of the project's Improvement Plans.*

Mitigation Measure CUL-3: *Prior to start of construction, all construction and personnel involved in ground disturbing activities and the supervision of such activities will undergo worker environmental awareness training for the identification and best practices for cultural resources. Training will be presented by a Placer County approved cultural resources consultant. This measure shall be included on the Notes sheet of the project's Improvement Plans.*

VI. ENERGY

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

Responses to Checklist Questions

Response a-b):

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project would construct a six-legged roundabout at Bell Road that includes the Bowman Road intersection and the I-80 WB ramps intersection as well as a five-legged roundabout at Bell Road that includes the I-80 EB ramps intersection and the Musso Road intersection. To adequately accommodate queues and delays, both roundabouts have been designed as hybrid roundabouts. A hybrid roundabout includes a combination of single and multi-lanes. The roundabouts would be designed to accommodate future growth "2045." Intersection geometrics and pedestrian crossings would be consistent with the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition" (Guide). A literature review by the Insurance Institute for Highway Safety found that roundabouts can reduce fuel consumption by 23% to 34% and CO_2 emissions by approximately 23% to 37% (IIHS 2018)

The Proposed Project would include a 10-foot shared use path separated from the roadway with a landscaped buffer (minimum 5-foot) for pedestrian/bicyclist safety and to guide pedestrians/bicyclists to correct crossing locations; Crosswalks and Americans with Disabilities Act (ADA) accessible ramps along pedestrian facilities. The project would provide enhanced lighting to improve roadway visibility for drivers during nighttime hours. Lighting is anticipated to be installed at ramp merges and diverges along the shoulders of I-80. The electroliers would be supported on a cast-in-drilled-hole concrete pile (with a typical diameter of 2.5 feet and length of five feet). New conduits, trenching, and power service connections would be required to install lighting along the shoulders.

Construction-period sources of project energy consumption include fuel used by vehicle trips generated during project construction, and fuel used by off-road construction vehicles during

construction. Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A quantification of potential fuel consumption shows the project's construction equipment is estimated to require approximately 569,560 gallons of diesel.

Operational non-mobile energy consumption would be negligible as the project does not propose any new structures or uses that would use energy. Because the project does not include any structures, the amount of electric required for operation of the project would be extremely low and would generally be limited to enhanced safety lighting. Proposed project landscape maintenance activities could require the use fossil fuel (i.e., gasoline) energy. For example, lawn mowers require the use of fuel for power. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar projects or existing maintenance needs. The project would not result in a significant new need for or use of energy. A minor amount of new lighting may be provided at locations for increased safety and visibility. New lighting would be energy efficient lighting consistent with current code.

Operational mobile energy consumption was estimated using the project VMT and speeds. The project would not change the intersection VMT, fleet mix, or Average Annual Daily Trips. However, the project would improve the vehicle flow through the intersection and result in less congestion and vehicle idling. For operations, existing conditions (2019) consumes an estimated 598,878 gallons of gasoline per year. Operational fuel consumption would decrease to an estimated 579,184 gallons per year under the No Build Alternative in year 2025. However, the 2025 Build Alternative would consume even less gasoline, at an estimated 363,163 gallons per year. In year 2045, the difference between the No Build and Build Scenario fuel consumption would be even greater, with the No Build consuming an estimated 720,204 gallons annually, while the Build Scenario would consume an estimated 3,78,265 gallons annually. Therefore, the project would reduce operational mobile energy consumption.

Energy for the project would also be required during construction but would not require additional capacity on a local or regional scale. Once constructed, the proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a ***less than significant*** impact.

VII. GEOLOGY AND SOILS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation***	***Less Than Significant Impact***	***No Impact***
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?		X		
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) 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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Responses to Checklist Questions

Responses a.i), a.ii):

A Geotechnical Design and Materials Report was completed for the proposed project by Parikh, which was approved December 2020 by Caltrans, and is included in Appendix E. The project lies within a potentially seismically active area. Faults in the project region and according to the California Geological Survey Fault Activity Map of California are late Quaternary (<700,000yrs). Table 3 shows data for the closest faults to the project site. Each of the faults listed in Table 3 are part of the Foothills Fault System which is the dominant structural feature of the western Sierra Nevada.

Table 3 – Known Area Faults

Fault	Maximum Magnitude, M_{Max}	Approximate Distance (Miles)
DeWitt	6.3	2.95
Deadman	6.2	3.75
Highway 49	6.2	4.92
Spencerville	6.5	9.45

Fault distances are derived from the California Geological Survey Fault Activity Map of California.

The project in not located within an Alquist-Priolo Earthquake Fault Zone, and the USGS Quaternary fault and fold database for the United States shows the Project is not within 1,000 feet of an un-zoned fault that is less than Latest Pleistocene (<15,000 years) in age. The potential for surface fault rupture is low. However, the existence of unknown active faults is not precluded.

The project does not include the construction of housing or other amenities that would increase the number of people exposed to seismic hazards. Additionally, in order to minimize potential damage to the proposed project caused by groundshaking, all construction would comply with the latest recommended design is based on Caltrans Design Criteria, which would ensure that impacts associated with seismic hazards would be ***less than significant***. No additional mitigation is required.

Responses a.iii), d):

Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present.

Liquefaction is a phenomenon in which saturated cohesionless soils are subject to a temporary but essentially total loss of shear strength under the reversing, cyclic shear stresses associated with earthquake shaking. Submerged cohesionless sands and silts of low relative density are the type of soils which usually are susceptible to liquefaction. Clays are generally not susceptible to liquefaction.

As described in the Geotechnical Design and Materials Report completed for the proposed project a liquefaction analyses based on the available boring data per Youd et al. (2001) was performed. As indicated by studies in soil liquefaction engineering (Bray, 2006), soils with sufficient fines content so as to separate the coarser particles and control behavior, liquefaction appears to occur in soils where these fines are either non-plastic or are low plasticity silts and/or silty clays (PI<12% and LL<37%), and with high water content relative to their liquid limit (W%>0.85LL).

Based on the analysis included in the Geotechnical Design and Materials Report, liquefaction potential does not exist at the site, therefore this is considered a ***less than significant*** impact relative to this environmental topic.

Responses a.iv):

Landslides have not been observed in the project area. Limited potential and risk exists for grading and construction activities, and roadway improvements that will require cut and fill. Based the current design of the proposed project, the project will require cut for the soil nail wall construction and roadway widening. Stability and settlement of the new fill will be analyzed in the retaining wall foundation report, and any special design criteria would be identified and implemented at that time as required by Mitigation Measure GEO 1. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic with implementation of the below mitigation measure.

Mitigation Measures:

> ***Mitigation Measure GEO-1:*** *Prior to earthmoving activities, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. The grading and improvement plans, shall be designed in accordance with the recommendations provided in the final geotechnical evaluation*.

Responses b):

During the construction preparation process, existing vegetation would be removed to grade and compact the project site, as necessary. As construction occurs, these exposed surfaces could be susceptible to erosion from wind and water. Effects from erosion include impacts on water quality and air quality. Exposed soils that are not properly contained or capped increase the potential for increased airborne dust and increased discharge of sediment and other pollutants into nearby stormwater drainage facilities. Risks associated with erosive surface soils can be reduced by using appropriate controls during construction and properly re-vegetating exposed areas. Implementation of various best management practices (BMPs) associated with the project-specific SWPPP would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. The project area would be paved and re-vegetated with native plants and the operational erosion potential would remain similar to existing site conditions. The implementation of BMPs included in the required SWPPP would ensure these impacts are ***less than significant***.

> ***Mitigation Measure:*** *Implement Mitigation Measure Hydro-1*

Response c):

Liquefaction: Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. As stated previously under Response a, the project site is not considered susceptible liquefaction. Therefore, this impact would be considered a ***less than significant*** impact.

Lateral Spreading: Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is also

directly associated with areas of liquefaction. As described previously, the potential for liquefaction low, and the potential for lateral spreading is generally considered low. No lateral spreading has been observed within the project site or surrounding area therefore, this is considered a ***less than* significant** impact.

Landslides: Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e., cut and fill). Based the current design of the proposed project, the project will require cut for the soil nail wall construction and roadway widening. Stability and settlement of the new fill will be analyzed in the retaining wall foundation report, and any special design criteria would be identified and implemented at that time. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Collapsible Soils: Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Differential settling has not been identified or observed on the project site, and no additional structures are proposed. As such, implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Subsidence: Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Common causes of land subsidence from human activity include: pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils. However, subsidence is not a characteristic of the soil series found within the study area, and the project does not include any additional pumping of extractive resources. Therefore**,** implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Conclusion:

The project is proposing to construct a roundabout and sidewalks and restripe streets generally in an area within existing ROWs and existing public streets. These areas have already been determined through past construction to be suitable for development and are not located in areas with unstable soils. The proposed improvements are not sensitive to landslide, lateral spreading, subsidence, liquefaction or collapse. Limited landslide potential exists where cut and fill activities are required, however any cut areas would be required to abide by constructions and design standards and any retaining wall recommendations included in the retaining wall foundation report prior to project implementation as required by Measure GEO 1. Therefore these impacts would be considered ***less than significant****.*

Mitigation Measure: *Implement Mitigation Measure GEO 1*

Responses d): Expansive soils are those that shrink or swell with the change in moisture content. The volume of change is influenced by the quantity of moisture, by the kind and amount of clay in the soil, and by the original porosity of the soil. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause

damage to foundations, concrete slabs, roadway improvements, and pavement sections. Linear extensibility percent is the linear expression of the volume difference of natural soil fabric at 1/3-bar or 1/10-bar water content and oven dryness. The volume change is reported as percent change for the whole soil and varies from Low under percent 3 to very high over 9 percent.

According as indicated by the USDA Web Soil Survey, project soils are identified as having 1.5 to 2.2 percent rating which indicated a low susceptibility to expansion. As such this is considered a ***less than significant*** impact.

Response e): The proposed project would not require the use of septic tanks or alternative waste water disposal systems for the disposal of waste water. Implementation of the proposed project would result in ***no impact*** relative to this topic.

Response f): The field and record surveys did not reveal any surface evidence of paleontological resources on the project site. The project site is not expected to contain subsurface paleontological resources, although it is possible. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of the following mitigation measure would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. This would ensure that any potentially significant impacts would be reduced to a ***less than significant*** level regarding this topic.

> ***Mitigation Measure GEO-2:*** *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the Placer County shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.*

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		X		
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?		X		

Background

GHG emissions from transportation projects can be divided into those produced during operation and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion.

Generally, greenhouse gas emissions are addressed as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself" (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

A Climate Change Technical Memorandum (included as Appendix F) has been prepared for the proposed project. This document summarizes climate change issues associated with the proposed Bell Road at I-80 Interchange Project. The Technical Memorandum presents an overview of climate change terms, the regulatory setting, environmental setting, greenhouse gas reduction strategies, and adaptation strategies applicable to the project.

Pursuant to PCAPCD guidance, the project would have a significant impact for greenhouse gases if it would result in project-generated emissions (construction-only project such as roadway, pipeline, or levee construction) in excess of the following:

- 10,000 MT CO_2e/yr

<u>Basis of Threshold Selection</u>

A review of the PCAPCD's handbook was conducted to determine the most appropriate threshold to apply to the project. The review included the PCAPCD's basis of thresholds, and recommended steps in determining the significance of project GHG thresholds.

The PCAPCD provides the following threshold options for assessing greenhouse gas emissions impacts under CEQA:

Brightline Threshold

- 10,000 MT CO_2e/yr

Efficiency Matrix

- 4.5/5.5 (urban/rural) MT CO_2e/capita for residential
- 26.5/27.3 (urban/rural) MT CO_2e/1,000 sf for non-residential)

De minimis Level

- 1,100 MT CO_2e/yr

The PCAPCD does not explicitly identify which threshold is most appropriate for construction-only projects, such as roadway projects. However, the PCAPCD's handbook does identify which of the three recommended thresholds are not appropriate for construction-only projects. As detailed below, the efficiency matrix and de minimis level are not appropriate for roadway projects. The brightline threshold is appropriate to use for the project.

Per the PCAPCD's handbook, the brightline threshold is the point at which a project would be deemed to have a cumulatively considerable contribution to global climate change. In general, GHG emissions from a project (either the construction or operational phase) that exceed 10,000 MT CO_2e/yr would be deemed to have a cumulatively considerable contribution to global climate change. Furthermore, the PCAPCD states:

> The Efficiency Matrix and De Minimis level (1,100 MT CO_2e /yr) are only applied to land use projects as they are not applicable for stationary (Industrial) projects and construction-only projects such as roadway, pipeline, or levee construction projects. (emphasis original to PCAPCD Handbook)

Additionally, the PCAPCD Handbook provides the following guidance for how to determine significance after emissions have been quantified:

> At this step, the project's total annual GHG emissions should consider all state and federal rules and regulations and should then be compared to the District's GHG operational significance thresholds.
>
> <u>1) Total GHG emissions are less than the De Minimis Level of 1,100 MT CO_2e/yr</u>
> The project can be considered as less than cumulatively considerable since its contribution is relatively small compared to the cumulative GHG emissions in Placer County. No further GHG analysis will be required. However, the project will still be required to be in compliance with state and local regulations such as building codes and energy efficiency standards.
>
> <u>2) Total GHG emissions are between 1,100 MT CO_2e/yr (De Minimis Level) and 10,000 MT CO_2e/yr (Bright-line threshold)</u>
> The project is required to conduct an efficiency analysis to further identify if its efficiency would meet one of conditions in Efficiency Matrix based on the proposed location and land use type. If the project cannot meet the associated efficiency condition, the lead agency should identify appropriate mitigation measures for the project. Please note that the Efficiency Matrix is only applied for land use projects with residential and/or commercial components. A stationary project or construction-only project such as roadway construction is not required to meet the efficiency condition.
>
> <u>3) Total GHG emissions exceed the Bright-line threshold of 10,000 MT CO_2e/yr</u>
> The project's related GHG impacts are considered cumulatively considerable and all

feasible mitigation measures should be identified to mitigate the project's related GHG emissions. (Emphasis Added)

Therefore, based on the guidance provided by the PCAPCD and lacking threshold specific for transportation projects, it has been determined that the most appropriate and applicable threshold is PCAPCD's brightline threshold of 10,000 MT CO_2e/yr.

Responses to Checklist Questions
Responses a) and b):

Operational Emissions

The primary purpose of the proposed project is to efficiently and safely convey traffic through the interchange. The secondary purpose of this project is to improve operations, reduce delay, and enhance mobility for all travel modes at the interchange. The project would achieve these goals by replacing the existing intersection with two modern, yield-controlled, single and multi-lane roundabouts designed to accommodate the Ultimate Design Year traffic forecast volumes. As described in the Climate Change Technical Memorandum roundabouts can reduce fuel consumption by 23 to 34% and CO_2 emissions by approximately 23 to 37%. The project design also best meets the safety purpose of the project for all modes of travel, while addressing future mobility needs.

The project is not intended to increase the vehicle capacity of the roadway, but rather to address safety and multi-modal circulation issues. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes at the project intersections, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. While some GHG emissions during the construction period would be unavoidable (see discussion below), there would be improved traffic flow through the intersection and an associated reduction in future idling during project operation. Greenhouse gas emissions were quantified for the Existing, No Build and Build Scenarios. The emissions output for greenhouse gases is provided in Table 3. As shown in the table, the Build Scenario would result in lower emissions than the Existing conditions and the No Build Scenario. Therefore, the project would result in a reduction in operational GHG emissions as compared to continued use of the project intersection without project improvements. Additionally, there would likely be long-term GHG benefits from improved pavement surfaces.

Table 4. Project Operational Greenhouse Gas Emissions

Parameter	CO_2 (annual tons)	CH_4 (annual tons)
2019 Existing Emissions		
Existing Conditions	5,869	0.20
2025 Emissions		
No Build Alternative	5,676	0.12
Build Alternative	3,595	0.05

Parameter	CO_2 (annual tons)	CH_4 (annual tons)
Change in Emissions	*-2,117*	*-0.07*
2045 Emissions		
No Build Alternative	7,058	0.09
Build Alternative	3,707	0.02
Change in Emissions	*-3,351*	*-0.07*

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction period GHG emissions were quantified using Sacramento Metropolitan Air Quality Management District's (SMAQMD's) Roadway Construction Emissions Model (version 9.0.0). Construction parameters included a construction start year of 2022, and a duration of 17 months. Total construction-generated CO_2 gas emissions were estimated to be 1,209 total tons (1,108 $MTCO_2e$, consisting of CO_2, CH_4, N_2O). The construction-generated GHG emissions for the project equals 37 $MTCO_2e$ per year when annualized over an assumed 30-year period.

Additionally, all construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all applicable air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

Conclusion

Placer County is part of a larger metropolitan planning jurisdiction (El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties), which is coordinated by the Sacramento Area Council of Governments (SACOG). SACOG is designated by the federal government as the MPO for the Sacramento region. Placer County has its own state designation as a Regional Transportation Planning Agency (RTPA) that is responsible for developing its own transportation plans. The Placer County Transportation Planning Agency's (PCTPA) two most recent RTPs are

incorporated into SACOG's regional planning processes through the Metropolitan Transportation Plan (MTP). The proposed project is included in the adopted 2020 MTP/SCS. The regional passenger vehicle GHG emissions reduction target for SACOG is 19 percent below 2005 levels by 2035 (ARB 2020). The 2020 MTP/SCS demonstrates a 19 percent reduction from the 2005 baseline.

The proposed project is consistent with and supports the future development of projects that is included within the PCTPA projects list. Overall, the proposed project would be consistent with the goals and strategies of the RTPA and MTP/SCS.

While the proposed project will result in GHG emissions during construction, these temporary GHG emissions would not be considered significant and would not limit the state's ability to attain the goals identified in AB 32. Additionally, it is anticipated that the project will not result in an increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. It is not anticipated that the project would generate greenhouse gas emissions that may have a significant impact on the environment. The project would be required to implement construction GHG-reduction measures as described below. Implementation of the proposed project with the following mitigation measure would result in a ***less than significant with mitigation incorporation*** impact relative to this topic.

Mitigation Measures:

> ***Mitigation Measure GHG 1:*** *Consistent with CAPCOA's Measure C-3: Limit Construction Equipment and Heavy-duty Vehicles Idling beyond Regulation Requirements set by the California Air Resources Board (CARB) Heavy-Duty Vehicle Idling Emission Reduction Program which limits diesel-fueled commercial motor vehicles idling time to 5 minutes.*
>
> *Require idling times of 3 minutes or less during loading/unloading and during layovers or rest periods with the engine still on. This measure is not applicable when providing a power source for equipment or operations such as lift, crane, pump, drill, hoist or other auxiliary equipment. This requirement shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the requirement.*
>
> ***Mitigation Measure GHG 2:*** *Require the construction contractor to follow Placer County Air Pollution Control District's Recommended Construction Mitigation Measures including but not limited to:*
>
> - *Maintaining all construction equipment properly according to manufacturer's specifications.*
> - *Use Electrified equipment when feasible*
> - *Use alternatively fueled construction equipment on-site where feasible*

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		X		
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Responses to Checklist Questions

Response a):

Operational impacts from the proposed project would not result in increased routine transport, use or disposal of hazardous materials. The use, clean up, and disposal of potentially hazardous construction materials is managed according to standard procedures to protect air quality, water quality, and the environment. Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel). The use of these materials is normal at any construction site and will not pose a reasonable risk of release into the environment if properly handled, and transported. However, a release into the environment could pose significant impacts to the health and welfare of people and/or wildlife, and could result in contamination of water, habitat, and agricultural resources. This includes fuels and petroleum products.

An Initial Site Assessment (ISA) was approved by Caltrans on April 21, 2020. The ISA identified the following:

- Based on the agricultural use of the land, pesticides, herbicides, and heavy metals may be present along the roadway.
- There is a potential for elevated levels of lead in exposed soil from historical vehicle emissions, since leaded gasoline was used through the 1970s. The shoulders of the roadway may contain aerially-deposited lead (ADL).
- There are potential polychlorinated biphenyls (PCBs) in pole-mounted electrical transformers near the project. As of the date of the ISA, the existence and/or levels of PCBs associated with the pole-mounted electrical transformers, which may be encountered within the planned construction area, have not been determined.
- There are potential lead and heavy metals within the pavement striping. Implementation of improvements may require the removal and disposal of yellow traffic striping and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape).
- Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations, and require disposal in a Class I disposal site.
- Treated wood supports for metal beam guard rails, street signs, and often utility poles are made from treated wood. Treated wood contains hazardous chemicals (arsenic, copper, chromium, creosote, and pentachlorophenol).
- All Asphalt Concrete materials should be recycled per the Caltrans directive for reclaimed Asphalt Concrete (AB 1306), in accordance with the January 27, 1993 Memorandum on "Department of Fish and Game Agreement on Asphalt Concrete Grindings, Chunks and Pieces.

Based on the findings of the ISA, the following recommendations were made:

- A Preliminary Site Investigation-Aerially Deposited Lead (PSI-ADL) Study should be prepared to sample soil for pesticides, heavy metals, lead, and PCBs.
- If it is anticipated that the utility poles are moved or replaced during construction, abate transformers prior to construction.
- Abate striping prior to demolition:
    - Caltrans Standard Specification Section 14-11.12 (10/19/2018): Remove Yellow Traffic Strip and Pavement Marking with Hazardous Waste Residue – Requires proper management of hazardous waste residue and a lead compliance plan.
    - Caltrans Standard Specification Section 36-4 (10/19/2018): Containing Lead from Paint and Thermoplastic - Requires a lead compliance plan for removal when residue is definitely nonhazardous.
    - Caltrans Standard Specification Section 84-9.03C (10/19/2018): Remove Traffic Stripes and Pavement Markings Containing Lead - Requires a lead compliance plan for removal when residue is definitely non-hazardous. Used for new yellow paints and all other colors of paint.
- If utility poles are removed and relocated, manage as treated wood waste:

  - Caltrans Standard Specification Section 14-11.14 (10/19/2018): Treated Wood Waste; and
  - Department of Toxic Substances (DTSC) Treated Wood Waste Alternative Management Standard (22 California Code of Regulations [CCR] Chapter 34).
- Recycle Asphalt Concrete and Portland Cement Concrete:
  - Caltrans Asphalt Concrete and Portland Cement Concrete Grindings Reuse Guidance (2007);
  - Caltrans Standard Specification Section 15-1.03B "Removing Concrete" – Use where concrete is described to be removed;
  - Caltrans Standard Specification Section 60-2.01A (10/19/2018): Use for removing structures or portions of structures, including bridges, retaining walls, sound walls, and other concrete or masonry structures; and
  - Concrete waste should be reclaimed and recycled as appropriate.

Based on the recommendations from the ISA, a PSI-ADL Study was prepared and approved by Caltrans on June 30, 2020. (Included in Appendix G) The Study identified the following:

- Detectable lead concentrations in shallow soil within the project area ranged from 0.23 to 40 milligrams per kilogram (mg/kg), which are below the regulatory limit of 80 mg/kg. Therefore, the soil is pre-classified as Non-Hazardous.
- Detectable Arsenic concentrations (1.6 and 17 mg/kg) in the project area did not exceed 10 times the Solubility Threshold Limit Concentration (STLC) regulatory limit (5 milligrams per liter [mg/L]) and can be pre-classified as Non-Hazardous. Detectable chromium concentrations (19 to 64 mg/kg) in the project area did exceed 10 times the STLC regulatory limit and three samples were analyzed using the California Waste Extraction Test (CA WET). The concentrations were below the STLC regulatory limit; therefore, the soil can be pre-classified as Non-Hazardous. However, the Arsenic and Chromium concentrations in soil exceeded the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), and soil in these areas need to be managed for worker safety.
- All asphalt (AC) and concrete removed during roundabout construction can be reclaimed and recycled.
- Potential arsenic, copper, chromium, creosote, and pentachlorophenol may be present in treated wood used for utility poles.
- Potential PCBs in pole-mounted electrical transformers along the project area.
- Potential lead and lead-chromate are associated with traffic striping. Implementation of improvements may require the removal and disposal of yellow traffic striping and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape). Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22 CCR and require disposal in a Class I disposal site.
- Detectable Arsenic concentrations (1.6 and 17 mg/kg) in the project area did not exceed 10 times the STLC regulatory limit (5 mg/L) and can be pre-classified as Non-Hazardous. Detectable chromium concentrations (19 to 64 mg/kg) in the project area did exceed 10 times the STLC regulatory limit and three samples were analyzed using CA WET. The concentrations were below the STLC regulatory limit; therefore, the soil

can be pre-classified as Non-Hazardous. However, the Arsenic and Chromium concentrations in soil exceeded the RWQCB ESLs, and soil in these areas need to be managed for worker safety.

Mitigation Measure HAZ 1 requires that a Hazardous Materials Business Plan be submitted to the County for approval prior to grading and construction activities. Additionally, based on the findings of the PSI-ADL Study, Mitigation Measure HAZ 2 provides recommendations that will be implemented during project demolition and construction. Implementation of the following measures would ensure any potential impacts would be reduced to ***less than significant*** levels relative to this topic.

Mitigation Measures:

Mitigation Measure HAZ-1: *Prior to project implementation a Hazardous Materials Business Plan shall be submitted to the County. In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the Placer County Health and Human Services Department. The SMP shall establish management practices for handling and disposal of hazardous materials, including fuels, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

Mitigation Measure HAZ 2: *Implement measures based on the findings of the PSI-ADL study including:*

- *The contractor(s) shall prepare a project-specific Lead Compliance Plan (CCR Title 8, §1532.1, "Lead in Construction" standard) to minimize worker exposure to lead-containing soil along Bell Road and should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-containing soil.*
- *Manage ADL waste per:*
  - *Caltrans-DTSC Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (June 2016) for re-use and disposal.*
  - *Caltrans Standard Specification Section 7-1.02K(6)(j)(iii) (DOCX) (10/19/2018) - Earth Material Containing Lead – Requires a lead compliance plan for soil disturbance when lead concentrations are non-hazardous.*
  - *Caltrans Standard Specification Section 14-11.08 - Regulated Material Containing Aerially Deposited Lead (2018).*
  - *Caltrans Standard Specification Section 14-11.09 - Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead (2018).*
- *Worker Safety Training shall include exposure to Arsenic and Chromium in soil (above RWQCB ESL levels).*
- *Dispose of excavated soils as Non-hazardous waste at Class II unit or Class III landfill depending on facility acceptance standard, consistent with CCR Title 22 §66262.11 waste classification.*
- *All asphalt concrete (AC) materials should be recycled per the Caltrans directive for reclaimed AC (AB 1306), in accordance with the January 27, 1993 Memorandum on "Department of Fish and Game Agreement on AC Grindings, Chunks and Pieces."*
- *Caltrans Asphalt-Concrete and Portland Cement Concrete Grindings Reuse Guidance (2007).*

- *Caltrans Standard Specification Section 60-2.01A (DOCX) (10/19/2018) – Use for removing structures or portions of structures, including bridges, retaining walls, sound walls, and other concrete or masonry structures.*
- *Caltrans Standard Specification Section 60-2.02 (DOCX) (10/19/2018) – Use for bridge removal work.*
- *Treated wood removed from the project area would be managed in accordance with Title 22, Division 4.5, Chapter 34 of the California Code of Regulations.*
- *Abate transformers prior to construction; PG&E manages the electric lines and transformers.*
- *Abate striping prior to construction following Caltrans' 2018 Standard Specifications:*
  - *Caltrans Standard Specification Section 14-11.12 (DOCX) (10/19/2018) - Remove Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue – Requires proper management of hazardous waste residue and a lead compliance plan.*
  - *Caltrans Standard Specification Section 36-4 (DOCX) (10/19/2018) - Containing Lead from Paint and Thermoplastic - Requires a lead compliance plan for removal when residue is definitely non-hazardous.*
  - *Caltrans Standard Specification Section 84-9.03C (DOCX) (10/19/2018) - Remove Traffic Stripes and Pavement Markings Containing Lead - Requires a lead compliance plan for removal when residue is definitely nonhazardous. Used for new yellow paints and all other colors of paint.*

Response b):

Operation of the proposed project would not result in a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The use, clean up, and disposal of any potentially hazardous construction materials encountered during construction will be managed according to standard procedures to protect air quality, water quality, and the environment as per state laws and is not expected to result in a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. For example, in such event the project would be subject to the Placer County Placer County Health and Human Services Department's Hazardous Materials Business Plan Program, which aims to protect the public health and safety and the environment by establishing business and area plans relating to the handling and release or threatened release of hazardous materials. Implementation of Measure HAZ-1 would require a hazardous materials plan and would ensure impacts would be ***less than significant*** relative to this topic.

Mitigation Measure: *Implement Mitigation Measure HAZ-1.*

Response c):

The proposed project would not emit hazardous emissions or handle hazardous or increase hazardous materials, substances, or waste. Bowman Charter School, 13777 Bowman Rd, Auburn, CA 95603 is located approximately 1 mile southwest of the project area. As discussed above, hazardous materials used, stored or transported as part of the proposed project are anticipated to be limited. The project would have a ***less than significant*** impact relative to this topic.

Response d):

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, project implementation would have ***no impact*** relative to this topic.

Response e):

The nearest airport, the Auburn Municipal Airport – Auburn Airport is located on 210 acres in the northeast section of the City of Auburn, in Placer County, between Highways 49 and 80, and south of Dry Creek Road. The airport was established in 1947, and is owned and operated by the City of Auburn. The airport is located approximately 2.2 miles west of the project site. As described in the Placer County Airport Land Use Compatibility Plan the project site is located within Compatibility Zone D. This zone includes areas sometimes overflown by aircraft arriving and departing the Airport. Hazards to flight are the only compatibility concern. The outer limits of the zone coincide with the outer edge of the conical surface defined by FAR Part 77 for the Airport. Except on high terrain, height limits are no less than 150 feet within this area.

The proposed roadway improvements are not prohibited within the aforementioned Compatibility Zone. The proposed uses and object heights would be consistent with Zone D. Therefore, the proposed project would not conflict with the Airport Land Use Compatibility, and would not result in a safety hazard or excessive noise for people residing or working in the project area. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response f):

The project site currently connects to an existing network of streets. The proposed roadway and circulation improvements would allow for greater emergency access relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

During construction potential emergency routes could be impacted. Measure HAZ 3 a project-level construction management plan that would develop strategies for motorist, and alternate routes and emergency response and evacuation to be maintained throughout construction.

Therefore, through implementation of the following measure impacts from project would be considered ***less than significant*** relative to this topic.

Mitigation Measures:

> ***Mitigation Measure HAZ-3:*** *The implementing agency shall develop a traffic control plan for construction projects to reduce the effects of construction on the roadway system throughout the construction period. As part of the traffic control plan, project proponents shall coordinate with emergency service providers to ensure that emergency routes are identified and remain available during construction activities.*

Response g):

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of fuels (i.e., grasslands, and forestlands) in the foothill and mountain areas of the County. The project would not result in development of structures or housing which would subject residents, visitors, or workers to long-term wildfire danger. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		X		
(i) Result in substantial erosion or siltation on- or off-site;		X		
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
(iv) Impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Responses to Checklist Questions

Response a):

As shown on Figure 5, the project is within the Coon Creek USGS Watershed (HUC-10). The Project's receiving water body is Dry Creek. Dry Creek, which is located approximately 0.71 miles north of the Project area and drains the Coon Creek watershed. Dry creek is not listed as a 303(d) waterbody. Coon Creek is listed as 303(d) water body for Ammonia and Indicator Bacteria (TMDL required).

The proposed project would not generate wastewater which would require treatment. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from existing site conditions. However, construction and operational activities have the potential to adversely degrade water quality in downstream tributaries if precautions are not taken. In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance

infrastructure, the application of BMPs to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project are required.

The Project improvements within Caltrans' right-of-way must comply with the post-construction stormwater treatment requirements of the National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (WDRs) for Caltrans (Order No. 2012-0011-DWQ), also known as the Caltrans NPDES Permit. The Project improvements within the County's right-of-way must comply with the Phase II Small Municipal Separate Storm Sewer System (MS4) General Permit (Order No. 2013-0001-DWQ).

The project will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP), which will include best management practices that ensure construction and operational water quality is not degraded downstream. The SWPPP must be approved by the Regional Water Quality Control Board, and is designed to meet certain standards for preventing water pollution through otherwise normal activities

Through compliance with the NPDES permit requirements, and compliance with the SWPPP, and implementation of BMPs, the proposed project would not result in a violation of any water quality standards or waste discharge requirements. Therefore, through compliance with the NPDES, and SWPPP requirements, the proposed project would result in a ***less than significant*** impact relative to this topic.

> ***Mitigation Measure Hydro -1:*** *The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the County of Placer and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Response b):

The proposed project would not require groundwater supplies and would not interfere with groundwater recharge. The project area is not a groundwater recharge area. As such, impacts from project implementation would be ***less than significant*** relative to this topic.

Responses c.i)-c.iv):

The proposed project would not alter a stream or river. The road right of way is currently an impervious surface. The widening of this roadway would result in additional impervious surfaces. As a standard practice, the County requires post-project runoff to be equal to or less than pre-project runoff, which would ensure that the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

As described in the Stormwater Data Report prepared for the proposed project, the pre-project impervious area includes 6.17 acres, while the post-project impervious area totals 6.15 acres.

In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, or otherwise degrade water quality, a SWPPP would be required. The SWPPP would require the application of BMPs to effectively reduce pollutants from stormwater leaving the site. This would ensure that stormwater runoff does not adversely increase pollutant levels and would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction and operational phases of the project. Additionally, the project area is not included in an area subject to flooding and is not included within a FEMA flood hazard area.

In order to ensure that stormwater runoff generated at the project site as a result of impervious surfaces does not exceed the capacity of the existing or planned stormwater drainage system, Mitigation Measure HYDRO-1 requires the project to complete a storm drainage infrastructure plan with. The project's storm drainage infrastructure plans shall, to the satisfaction of the County Engineer, demonstrate adequate infrastructure capacity to collect and retain, or direct all stormwater generated on the project site to existing stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts.

The following mitigation measure would require that a storm drainage plan be designed and engineered to ensure that post-project runoff is equal to or less than pre-project runoff. Therefore, impacts from project implementation would be reduced to a ***less than significant*** level relative to this topic.

Mitigation Measures:

> ***Mitigation Measure Hydro-2:*** *The project's storm drainage infrastructure plans shall, to the satisfaction of the County engineer, demonstrate adequate infrastructure capacity to collect and retain, or direct stormwater generated on the project site to the existing and future stormwater conveyance system.*

Response d):

The project site is not within a 100-year or 500-year flood zone as delineated by FEMA. The project site is not within a tsunami or seiche zone, Development of the proposed project would not place housing or structures in a flood hazard area. As a result, the proposed project would have a ***No Impact*** relative to this topic.

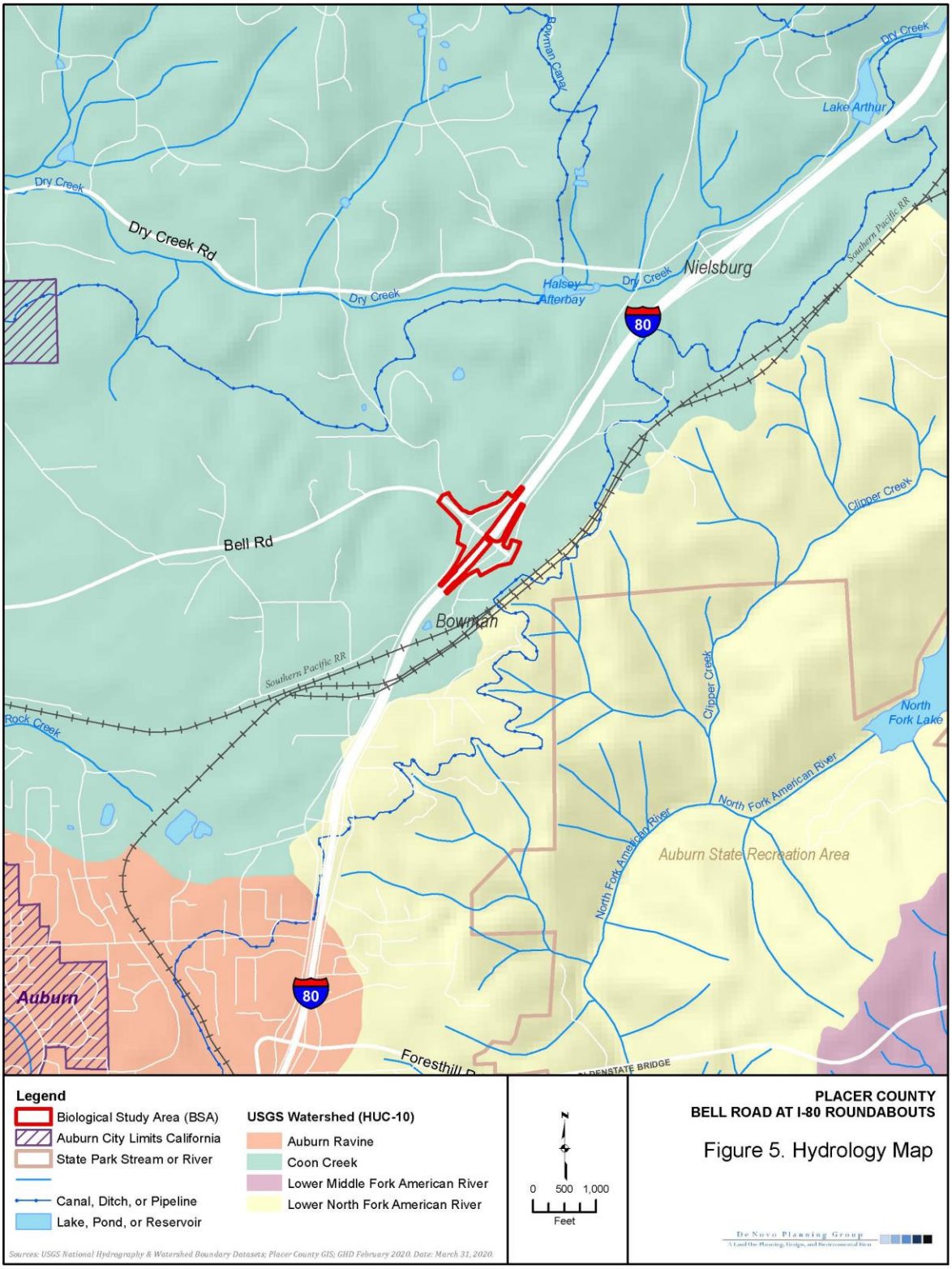
Response e):

The Project lies within an undefined groundwater basin of the Sacramento River Hydrologic Region. Per the Project's Preliminary Site Investigation, groundwater monitoring data near the Project area records depth to shallow groundwater ranging from 10 to 40 feet below ground surface, and groundwater flow direction is generally to the west (WRECO, 2020). A subsurface investigation was conducted by WRECO staff on September 30, 2019 that included shallow soil samples from 16 borings in areas proposed for excavation and soil disturbance. Groundwater was not encountered at any borings during sampling activities (WRECO, 2020).

The Basin Plan assumes that all groundwater in the region, unless otherwise designated by the CVRWQCB, is considered suitable or potentially suitable for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO). (CVRWQCB, 2018).

As discussed previously, the project would not result in increased impervious surfaces. Additionally, the project does not include any increases the use of, or additional uses that may require groundwater. It is not anticipated that the project would require substantial amounts of groundwater supplies during construction or operation. As such the project is not anticipated to decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Overall, implementation of the proposed project would have a ***less than significant*** impact related to this topic.


Dry Creek
Dry Creek Rd
Dry Creek
Bowman Canal
Dry Creek
Lake Arthur
Halsey Afterbay
Dry Creek
Nielsburg
Southern Pacific RR
80
Bell Rd
Bowman
Southern Pacific RR
Rock Creek
Clipper Creek
Clipper Creek
North Fork Lake
North Fork American River
North Fork American River
Auburn State Recreation Area
Auburn
80
Foresthill
Legend
Biological Study Area (BSA)
Auburn City Limits California
State Park Stream or River
Canal, Ditch, or Pipeline
Lake, Pond, or Reservoir
USGS Watershed (HUC-10)
Auburn Ravine
Coon Creek
Lower Middle Fork American River
Lower North Fork American River
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Sources: USGS National Hydrography & Watershed Boundary Datasets; Placer County GIS; GHD February 2020. Date: March 31, 2020.
PLACER COUNTY
BELL ROAD AT I-80 ROUNDABOUTS
Figure 5. Hydrology Map
De Novo Planning Group

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XI. LAND USE AND PLANNING

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Responses to Checklist Questions

Response a):

The project site would result in improvements to an existing roadway. Development of the project would not result in any physical barriers, or other division, that would divide an existing community, but would serve as an orderly roadway implement that has been identified and programed into the RTP. The project would have ***no impact*** in regards to the physical division of an established community.

Response b):

The key land use planning documents that are directly related to, or that establish a framework within which the proposed project must be consistent, include:

- Placer County General Plan; and
- Placer County Zoning Ordinance.

Construction activities would primarily occur within County-owned roadways, and local and State ROW. The proposed project would not require changes to any land use or zoning designations. Therefore, impacts to land use compatibility would be ***less than significant***.

XII. MINERAL RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Responses to Checklist Questions

Response a), b):

The California Department of Conservation, Division of Mine Reclamation identifies Mineral Resource Zones (MRZs) throughout the Placer County. The project site is not located within an area designated to areas containing mineral resources. The project site is not used for mineral extraction. The project site includes an existing roadway which would be improved as part of the proposed project. As such, mineral extraction in the project area near existing and future residential and other urban uses is unlikely. There are no identified state or regionally valuable mineral resources within the project boundary. Therefore, the project would not result in the loss of availability of a known mineral resource. This impact is considered ***less than significant***.

XIII. NOISE

Would the project result in:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

Key Noise Terms

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of noise.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.

CNEL Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.

Impulsive Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level. This section provides a general description of the existing noise sources in the project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

$L_{(n)}$ The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one hour period.

Loudness A subjective term for the sensation of the magnitude of sound.

Noise Unwanted sound.

SEL Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train pass-by, that compresses the total sound energy into a one-second event.

Responses to Checklist Questions
Response a):

Operational Noise

As described previously, the project will improve overall operations, circulation, and accessibility for drivers and cyclists at the existing Bell Road at I-80 Interchange. The project will not increase capacity for the roadway. Because the project would not increase the number of travel lanes at the project intersections, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. This type of non-capacity increasing project generally causes minimal or no increase in noise.

Construction Noise

Construction activities have the potential to create temporary, or periodic increases in ambient noise levels in the project vicinity above levels existing without the project. During the construction of the project, activities would add to the noise environment in the project vicinity. The site improvements and roadway construction would include the use of heavy equipment including grading and compacting that can generate noise. Noise would also be generated during the construction phase by increased truck traffic on area roadways. This noise increase would be of short duration.

Table 4 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

Table 4: Construction Equipment Noise

Type of Equipment	*Maximum Level, dB at 50 feet*
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Placer County Code Noise Ordinance 9.36.030 established the following noise limit exemptions and allowable hours for construction activities: Construction (e.g., construction, alteration or repair activities) between the hours of six a.m. and eight p.m. Monday through Friday, and between the hours of eight a.m. and eight p. m. Saturday and Sunday provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment should be maintained in good working order.

Implementation of these required measures (i.e., engine muffling), and compliance with the Municipal Code requirements, would serve to further reduce exposure to construction noise levels. Adherence to General Plan, Municipal Code (Noise Ordinance), would minimize any impacts from noise during construction.

Placer County establishes allowable hours of operation and noise limits for construction activities to minimize disturbance associated with construction activities. Compliance with the County's construction policies would minimize the potential for annoyance and ensure that existing uses are not exposed to excessive noise from construction activities. Because of the nature time and duration of construction activities noise from construction activities would cease upon project completion. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b):

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 5 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. 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 p.p.v.

Table 5: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec.	in./sec.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

The vibration-generating activities typically happen during construction when activities such as grading and road construction occur. Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 6 shows the typical vibration levels produced by construction equipment.

Table 6: Vibration Levels for Varying Construction Equipment

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

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006.

Construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Additionally, construction activities would be temporary in nature and would generally occur during normal daytime hours. Therefore, this impact would be considered ***less than significant***.

Response c):

The project is located within the airport land use area. The nearest airport, the Auburn Municipal Airport – Auburn Airport is located on 210 acres in the northeast section of the City of Auburn, in Placer County, between Highways 49 and 80, and south of Dry Creek Road. The airport was established in 1947, and is owned and operated by the City of Auburn. The airport is located approximately 2.2 miles west of the project site. As described in the Placer County Airport Land Use Compatibility Plan the project site is located within Compatibility Zone D. This zone includes areas sometimes overflown by aircraft arriving and departing the Airport. Hazards to flight are the only compatibility concern. The outer limits of the zone coincide with the outer edge of the conical surface defined by FAR Part 77 for the Airport. Except on high terrain, height limits are no less than 150 feet within this area.

The proposed roadway improvements are not prohibited within the aforementioned Compatibility Zone, and are not identified as being subject to noise impacts from aircrafts. Additionally, the proposed project does not include any permanent receptors, or other uses that would be subject to aircraft noise concerns. Therefore, the proposed project would not conflict with the Airport Land Use Compatibility Plan, and would not result in a safety hazard or excessive noise for people residing or working in the project area. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

XIV. POPULATION AND HOUSING

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Responses to Checklist Questions

Response a):

The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will improve the roadway system. However, improvements to the roadway system created by the project represent a planned effort to coordinate improvements to accommodate safer and better preforming intersections and these improvements are not capacity increasing. No population increases would result from implementation of the proposed project, and the project would not result in service extensions to areas previously unserved. Therefore, implementation of the proposed project would have ***no impact*** relative to this topic.

Response b):

The project site is located within Placer County and contains developed roadways, and undeveloped land. The proposed project would not displace housing or people. Implementation of the proposed project would have ***no impact*** relative to this topic.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Responses to Checklist Questions

Response a):

Fire Protection

The proposed project would not include additional residential units, or people to the county. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services. Therefore, implementation of the proposed project will have ***no impact*** to this topic.

Police Protection

The proposed project would not include additional residential units, or people to the county. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for police protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for police protection services. Therefore, implementation of the proposed project will have ***no impact*** relative to this topic.

Schools

The proposed project does not include any residential units, or any other type of use that would directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Parks

The proposed project does not include any residential units or any other type of use that would directly, or indirectly increase the population, or park demand in the area, or include any other type of use that would directly increase the park needs. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not have the potential to require

construction of additional park and recreational facilities which may cause substantial adverse physical environmental impacts. This, it is anticipated to have ***no impact*** relative to this topic.

Other Public Facilities

The proposed project would not result in a need for other public facilities that are not addressed in the Utilities and Service Section. The proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. This, it is anticipated to have ***no impact*** relative to this topic.

XVI. RECREATION

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
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?				X
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?				X

Responses to Checklist Questions

Responses a-b):

The proposed project does not include any residential units or any other type of use that would increase the population, or park and recreation facility demand in the area, or include any other type of use that would directly increase the use of park and recreation facilities. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated. Implementation of the proposed project would have a ***no impact*** relative to this topic.

XVII. TRANSPORTATION

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

Responses to Checklist Questions

Responses a:

The proposed project includes a 10-foot shared-use path that would convey pedestrian and bicycle traffic through the intersection and provide the opportunity for cyclists to exit the bicycle lane via a bicycle ramp and navigate the intersection on the shared-use path and through the crosswalks. Cyclists would also have the option to exit the bicycle lane and enter the roadway to ride with vehicle traffic through the roundabout.

Crosswalks would be split into two separate crossings through the provision of the pedestrian refuges at the splitter islands. These two-stage crossings would reduce the amount of sustained time a pedestrian is in potential conflict with motorized vehicles by limiting the length of each crossing and limiting each crossing to one direction of vehicle travel at a time. Pedestrian crossings would be a minimum of one car length from the circulatory roadway, and the pedestrian refuges at the splitter islands would be at least six feet wide, consistent with the NCHRP Guide.

The objectives of the project are to improve safety and mobility for bicyclists and pedestrians while improving circulation for motorist. The proposed project features identified in the Project Description meet these objectives and are consistent with the regional, state, and local plans for the circulation system and GHG and air quality emission reduction goals. The proposed design elements are intended to enhance bicycle and pedestrian safety and access consistent with the Placer County Regional Transportation Plan.

Once constructed, the project would have a beneficial impact on transportation circulation and safety and therefore would not conflict with any ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and impact would be considered ***less than significant***.

Responses b):

CEQA Guidelines §15064.3, subdivision (b) pertains to the use of vehicle miles traveled (VMT) to analyze transportation impacts. The Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (2018) provides technical recommendations regarding the assessment of VMT, non-binding thresholds of significance,

potential exemptions or presumptions of less-than-significant CEQA impacts, and mitigation measures.

Section F of the Technical Advisory notes that maintenance activities and the installation of operational features such as upgrading traffic control devices, adding turn pockets, or installing traffic calming measures are "unlikely to lead to a substantial or measurable increase in vehicle travel." As noted in CEQA Guidelines Section 15064.3(b)(2), transportation projects "that reduce, or have no impact on, vehicle-miles traveled should be presumed to cause a less that significant transportation impact."

The proposed project implements roadway improvement to increase vehicle, bike, and pedestrian safety. No new uses or amenities are proposed as part of the project and this improvement is not anticipated to increase VMT. Construction equipment and worker vehicles would generate vehicle trips over the construction period, which would be temporary and a minor addition to existing VMT. Therefore, the project would have a ***less than significant*** impact on VMT.

Response c):

No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

Response d):

No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Circulation would be improved with the proposed roadway improvements. As described in the Hazards section potential access issues could be experienced during construction and Measure HAZ 3 required that a traffic control plan be developed during roadway construction to ensure emergency access and safety. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

Mitigation Measures:

> ***Mitigation Measure:*** *Implement Mitigation Measure HAZ-3*

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

Responses to Checklist Questions

Responses a.i), a.ii): Although no tribal cultural resources have been documented in the project site, the project is located in a region where significant cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the tribal cultural resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the tribal cultural resource definition would include villages and cemeteries. Due to the possible presence of undocumented tribal cultural resources within the project site, construction-related impacts on tribal cultural resources would be potentially significant. AB-52 consultations were conducted by the County with three tribes (United Auburn Indian Community (UAIC), Ione Band of Miwok Indians, and Washoe Tribe of Nevada & California) and implementation of the following mitigation measures were agreed upon to help ensure that this potential impact is reduced to a ***less than significant*** level regarding this topic.

Mitigation Measures:

> ***Mitigation Measure:*** *Implement Mitigation Measure CUL-1; Mitigation Measure CUL-2; and Mitigation Measure CUL-3.*

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Responses to Checklist Questions

Response a): The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current land uses in the area. No additional demand for water, wastewater, storm water, natural gas, or telecommunications facilities will be created by the project.

Utilities within the construction limits include:

- Pacific Gas & Electric Company (PG&E) overhead electric lines;
- PG&E six-inch iron distribution line; and
- Placer County Water Agency 24-inch ductile iron pipe with air vacuum release valve (AVRV).

Constructing the project would require relocation of the PG&E poles for the overhead electric lines. Two poles could be impacted by the construction of the roundabout incorporating Bowman Road and Bell Road. Coordination with PG&E would be required before finalizing the design for the final location of the poles. PG&E also has a six-inch iron distribution line that runs under Bowman Road. The distribution line may require potholing to ensure new construction would not impact the existing pipe.

Placer County Water Agency has a 24-inch ductile iron pipe located northeast of the roundabout. Potholing may be required to ensure the pipe would not be impacted by the project construction.

However, at least one valve/vault would need to be relocated and two valves/vaults would need to be adjusted to grade.

Utility activities would remain in the existing disturbed ROW and APE, activities would have no impact to sensitive and/or protected natural habitat; therefore, impacts would be ***less than significant*.**

Response b): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current conditions. Demand for water supplies would be similar to the existing conditions. The project may require limited water to ensure the establishment of native plants; once established; the plans would need little or no irrigation. Additionally, some water may be needed during construction for dust control activities.

However, limited amounts of water would be necessary during the construction phase of the project, and during the establishment of native plants and vegetation, but this would be a temporary use of water, and would not be in substantial amounts. Therefore, the proposed project would not result in insufficient water supplies available to serve the project from existing entitlements and resources, and the proposed project would result in a ***less than significant*** impact to water supplies.

Response c): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current conditions. No additional demand for wastewater treatment, or other water treatment facilities will be created by the project. Therefore, implementation of the proposed project will have a ***less than significant*** impact relative to this topic.

Responses d), e): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from current conditions. No additional demand for landfill, or other waste facilities will be created by the project operation. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity. Disposal of construction waste would comply with federal, state, and local statutes and regulations related to solid waste.

The project would not interfere with regulations related to solid waste. Therefore, implementation of the proposed project will have a ***less than significant*** impact relative to this topic.

XX. WILDFIRE

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Responses to Checklist Questions

Responses a, c) The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed improvements would require long-term roadway maintenance; however, the roadway improvements would not exacerbate fire risk. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response b) The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e., grassland). The project would not result in development of structures or housing which would subject residents, visitors, or workers to long-term wildfire danger. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d) The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from existing conditions. The project will implement improvements to the roadway system. As such, exposure to people or structures to any significant risk would not result. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Response a): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, tribal cultural resources, utilities and service systems, and wildfire. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. This includes the potential for the proposed project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures.

For the reasons presented throughout this Initial Study, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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. With the implementation of mitigation measures presented in this Initial Study, the proposed project would be ***less than significant*** relative to this topic.

Response b): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, tribal cultural resources, utilities and service systems, and wildfire. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. These mitigation measures would also function to reduce the project's contribution to cumulative impacts.

The project would not increase the population or the use of public services and systems, and would not conflict with any applicable plans for the area. The proposed project would improve the safety and operation of the roadway system. There are no significant cumulative or cumulatively considerable effects that are identified associated with the proposed project after the implementation of all mitigation measures presented in this Initial Study. With the implementation of all mitigation measures presented in this Initial Study, the proposed project would have a ***less than significant*** impact relative to this topic.

Response c): The construction phase could affect surrounding neighbors through increases in temporary construction emissions and noise; however, the construction effects are temporary and are not substantial. The operational phase emissions, and noise would be similar to the existing conditions around the project site. Therefore, the operational phase of the proposed project would not cause substantial adverse effects on human beings. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

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