

# Carson Transportation Management Systems

Along State Routes 88 and 89 in Amador, El Dorado, and Alpine Counties

10-AMA, ED, ALP-88, 89-Post Miles Vary

EA 10-1G020 and Project Number 1018000275

State Clearinghouse Number 2022020581

## Initial Study with Proposed Mitigated Negative Declaration



**Volume 1 of 2**

Prepared by the  
State of California Department of Transportation

**October 2023**



## General Information About This Document

### ***What's in this document:***

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Amador, El Dorado, and Alpine counties in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

### ***What you should do:***

- Please read the document. Additional copies of the document and the related technical studies are available for review at the following: Caltrans District 10 Office at 1976 East Doctor Martin Luther King Junior Boulevard, Stockton, California 95205, Monday through Friday from 8:00 a.m. to 5:00 p.m.; Amador County Library at 530 Sutter Street, Jackson, California 95642; El Dorado County Library, South Lake Tahoe Branch, at 1000 Rufus Allen Boulevard, South Lake Tahoe, California 96150; and Alpine County Library at 270 Laramie Street, Markleeville, California 96120. Please refer to each library for its open hours. This document may be downloaded at the following website: <https://dot.ca.gov/caltrans-near-me/district-10/district-10-current-projects/10-1g020>.
- Attend the virtual public open house on November 14, 2023. More information regarding the virtual public open house can be found at the following website: <https://dot.ca.gov/caltrans-near-me/district-10/district-10-current-projects/10-1g020>.
- Tell us what you think. If you have any comments regarding the proposed project, please attend the virtual public open house, and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Jonathan Coley, District 10 Environmental Division, California Department of Transportation, 1976 East Doctor Martin Luther King Junior Boulevard, Stockton, California 95205. Submit comments via email to: [Jonathan.Coley@dot.ca.gov](mailto:Jonathan.Coley@dot.ca.gov).
- Submit comments by the deadline: December 1, 2023

### ***What happens next:***

After comments are received from the public and the reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

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Install various transportation management system elements  
at six locations along State Routes 88 and 89,  
throughout Amador, El Dorado, and Alpine counties

**INITIAL STUDY  
with Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation  
and  
Responsible Agency: California Transportation Commission

*C. Scott Guidi*

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Office Chief, District 10 Environmental  
California Department of Transportation  
CEQA Lead Agency

10/10/2023

Date

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## **DRAFT**

# **Proposed Mitigated Negative Declaration**

Pursuant to: Division 13, Public Resources Code

**State Clearinghouse Number:** 2022020581

**District-County-Route-Post Mile:** 10-AMA, ED, ALP-88, 89-Post Miles Vary

**EA/Project Number:** 10-1G020/1018000275

### **Project Description**

The California Department of Transportation (Caltrans) proposes to install transportation management system elements and roadside safety improvements at six locations in Amador, El Dorado, and Alpine counties along State Routes 88 and 89.

### **Determination**

An Initial Study has been prepared by Caltrans District 10. On the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

The project would have a potentially significant effect on aesthetics. The project would include the following mitigation measures to reduce impacts to less than significant:

Include planting in strategic locations to limit visual intrusion; install native plant material seeding to disturbed soil areas in the construction site; provide a minimum three-year vegetation establishment period; install lighting types that direct light downward, and employ shield fixtures to additional light sources to minimize light trespass; and paint or stain transportation management system elements and guardrail to match existing visual surroundings.

Please refer to Section 2.1.1 and Appendix C for a list of mitigation measures applied to the project.

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C. Scott Guidi  
Office Chief, District 10 Environmental  
California Department of Transportation

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Date



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# **Chapter 1**      Proposed Project

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## **1.1 Introduction**

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA) and the lead agency under the National Environmental Policy Act (NEPA).

The proposed project would install various transportation management systems elements and roadside safety improvements at six locations in the Kirkwood and Carson Pass area. The project includes locations in Amador, El Dorado, and Alpine counties along State Routes 88 and 89. El Dorado County is within the jurisdiction of Caltrans District 3, while Amador County and Alpine County are within Caltrans District 10.

State Route 88 is a trans-Sierra east-west-oriented corridor that provides year-round passage over the Carson Pass, starting at State Route 99 near Stockton and extending to the Nevada state line in Carson Valley. The facility is a two-lane, undivided conventional highway that carries mostly local commuter and passenger traffic, recreational and tourist traffic, and commercial truck traffic across San Joaquin, Amador, and Alpine counties. State Route 88 is dually designated as a State Scenic Highway and a U.S. Forest Service National Forest Scenic Byway.

State Route 89 is a two-lane, undivided conventional north-south corridor, which starts at US Route 395 at the edge of the eastern Sierra Nevada Mountains to the south and ends at Interstate 5 near Mount Shasta in Siskiyou County to the north. State Route 89 is designated as a State Scenic Highway at select areas within Alpine and El Dorado counties within the project limits.

The proposed locations are within the Kirkwood and Carson area, a year-round mountain destination along the Sierra Crest in El Dorado National Forest. State Routes 88 and 89 in the project area experience severe weather conditions in the winter months. The annual weather patterns create challenging conditions for motorists, and avalanche and chain control operations are common to the area. Limited cell phone and radio coverage, icy road conditions, and traffic queuing are typical factors that make severe weather conditions in the area challenging for motorists. To address these concerns, Caltrans proposes to install transportation management system elements and roadside safety improvements at six locations across Amador, El Dorado, and Alpine counties, along State Routes 88 and 89. The elements proposed at each location are identified in Table 1-1.

The following transportation management systems and roadside safety improvements would be included in the project:

- Changeable Message Sign
- Streetlight
- Vehicle Detection System
- Closed-Circuit Television Camera System
- Roadway Weather Information System
- Highway Advisory Radios
- Extinguishable Message Sign
- Maintenance Vehicle Pullout
- Midwest Guardrail System

Please refer to Appendix D for further description and sample images of the transportation management system elements included in this project.

## **1.2 Purpose and Need**

### **1.2.1 Purpose**

The purpose of the project is to improve roadway mobility and efficiency by addressing the effects of recurrent severe weather conditions on traffic through the strategic deployment of various transportation management systems on State Routes 88 and 89.

### **1.2.2 Need**

There is a need to inform motorists traveling through the Kirkwood and Carson Pass area of weather and traffic conditions that can affect their travel.

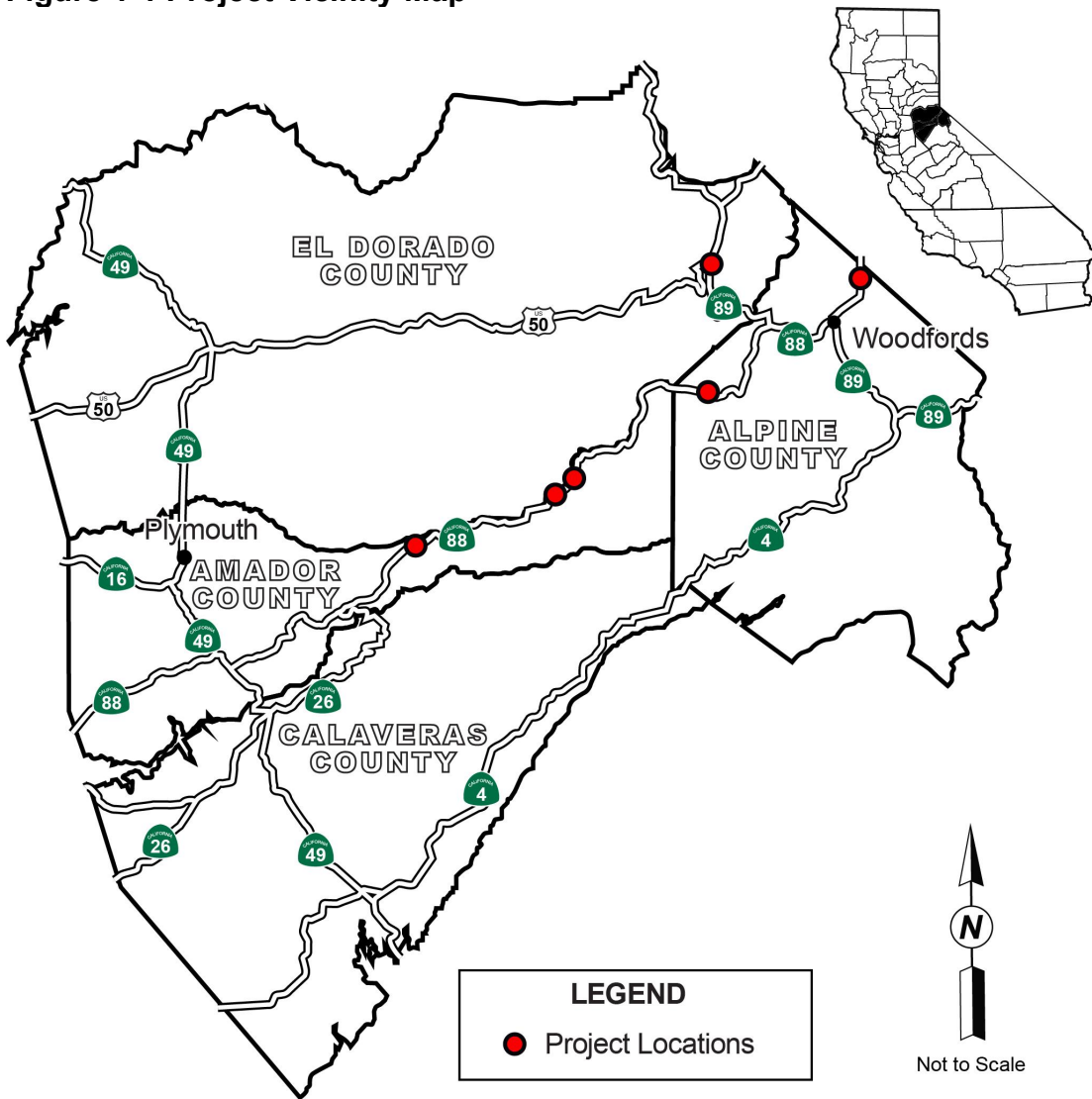
## **1.3 Project Description**

Caltrans proposes to install traffic management system elements and roadside safety improvements in and around the Kirkwood and Carson Pass areas at six locations in Amador, El Dorado, and Alpine counties on State Routes 88 and 89. The scope of work would include changeable message signs, vehicle detection systems, closed-circuit television camera systems, roadway weather information systems, highway advisory radios, extinguishable message signs, maintenance vehicle pullouts, Midwest guardrail systems, and a streetlight. The project would have one permanent easement at Location 2, which would acquire 0.063 acre of right-of-way under an existing easement with the U.S. Forest Service. Construction would

involve night work, work off the pavement, excavating, grading, trenching, and vegetation and tree removal. Figure 1.1 indicates the general project vicinity, and Figure 1.2 indicates the six project locations.

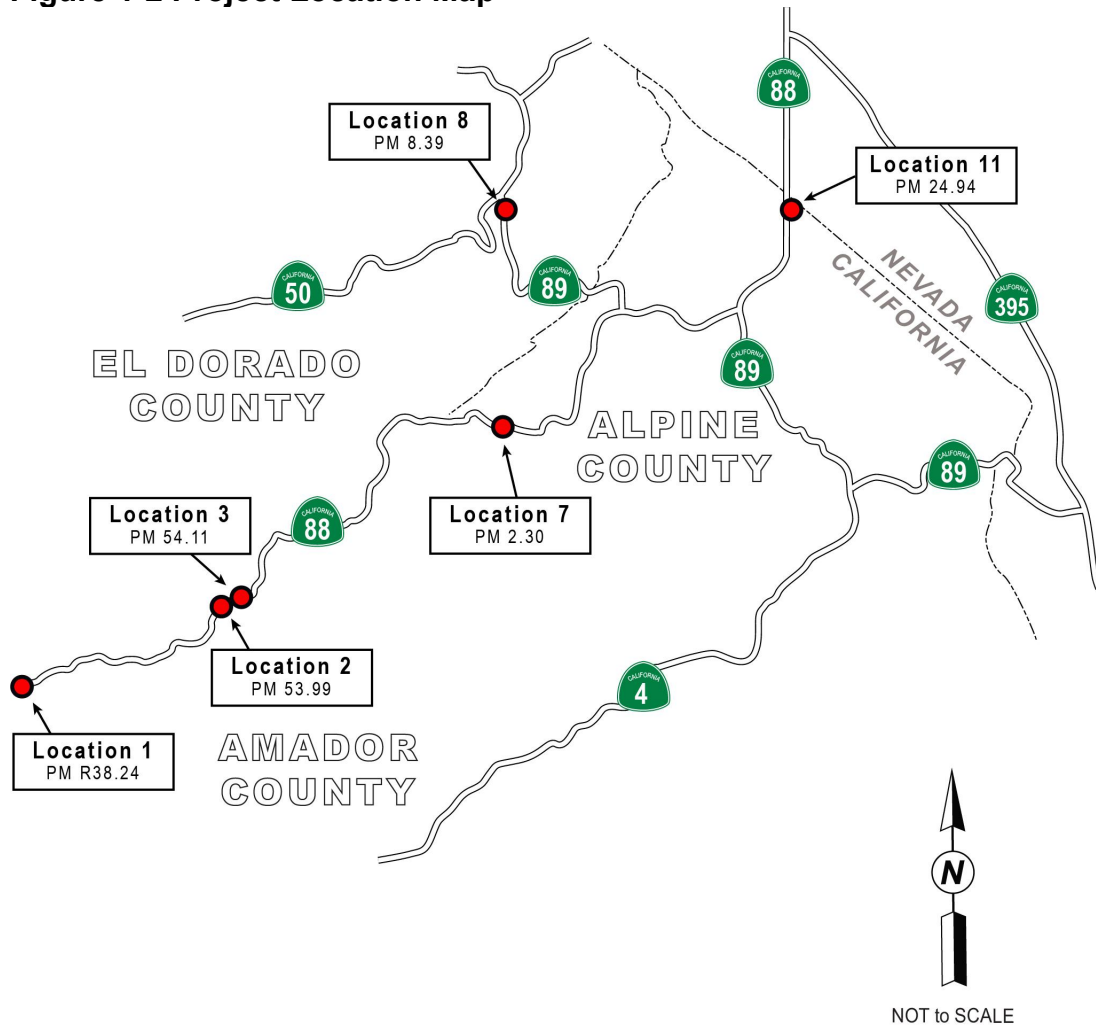
Please note: This project originally proposed 13 project locations. Following public review, Caltrans removed seven of the proposed project locations. The remaining six locations have retained their original numbering, and therefore are not numbered sequentially. For information regarding the locations that were removed from the project, please see Appendix B Project History.

Figure 1-1 Project Vicinity Map





**Figure 1-2 Project Location Map**



## 1.4 Project Alternatives

This section describes the proposed project alternatives developed to meet the purpose and need of the project. A Build Alternative and a No-Build Alternative are under consideration for the proposed project.

### 1.4.1 Build Alternative

The Build Alternative would install transportation management elements at six locations along State Routes 88 and 89 across Amador, El Dorado, and Alpine counties. Table 1-1 identifies the six project locations and the proposed work at each location. Staging areas would be used near the project locations to temporarily store construction equipment.

**Table 1-1 Project Locations and Proposed Work**

Location	County	State Route	Post Mile	Proposed Work
1	Amador	88	R38.24	Install one vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail, and replace existing changeable message sign with an updated changeable message sign.
2	Amador	88	53.99	Install one streetlight.
3	Amador	88	54.11	Install one changeable message sign with controller cabinets, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio system, two extinguishable message signs, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail.
7	Alpine	88	2.30	Install one vehicle detection system.
8	El Dorado	89	8.39	Install one vehicle detection system, one closed-circuit television camera system, one highway advisory radio system, one extinguishable message sign, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail, and replace the existing changeable message sign with an updated changeable message sign.
11	Alpine	88	24.94	Install one closed-circuit television camera system, one highway advisory radio system, two extinguishable message signs, and one guide sign.  Replace the existing changeable message sign with an updated message sign.

Please refer to Appendix E for additional descriptions and images of the project locations.

Project work would include work off the paved roadway, trenches, grading, or other ground disturbance, drainage work, tree and vegetation removal, and work on a U.S. Forest Service easement. The following is a description of work involved with each transportation management system element included in the project:

- **Changeable Message Signs** – Changeable message signs are mounted on a cast-in-drilled-hole foundation. The piles are made of reinforced concrete cast into holes that are drilled in the ground. The drill is typically mounted on a portable truck drilling rig. The drilling results in excess material that must be shoveled away from the hole. Concrete is pumped into the hole and fortified with a reinforcement cage. Concrete foundations are poured near the holes for the sign's electrical controller cabinets. Controller cabinets may require a raised concrete pad in front of the foundation. Constructing the foundations would require roadway or shoulder excavation. Trenching would be required to connect the controller cabinets to the signs.
- **Vehicle Detection System** – Installation of the vehicle detection systems would require shallow excavation of the roadbed and adjacent shoulder to install inductive loop detectors.
- **Closed-Circuit Television Camera System** – These systems would be installed on existing or proposed structures. Roadway or shoulder excavation or trenching would be required to connect the system with an electrical controller cabinet.
- **Roadway Weather Information System** – These systems would be installed on existing or proposed structures. Roadway or shoulder excavation or trenching would be required to connect the system with an electrical controller cabinet.
- **Highway Advisory Radio** – These systems would be installed on signage with transmitters, antennae, and connections to a power source.
- **Extinguishable Message Signs** – Extinguishable message signs would be mounted on cast-in-drilled-hole foundations, as described above.
- **Maintenance Vehicle Pullouts** – Installation of maintenance vehicle pullouts would require grading and paving of unpaved shoulder areas adjacent to existing roadway shoulders.
- **Streetlights** – Streetlights would be mounted on a cast-in-drilled-hole foundation as described above and would require roadway or shoulder excavation or trenching for electrical connections.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under "Standard Measures and Best Management Practices Included in All Build Alternatives."

### **1.4.2 No-Build (No-Action) Alternative**

The No-Build Alternative would leave all existing transportation management systems along State Routes 88 and 89 in their current condition. No additional improvement, systems, or roadside safety features would be installed. The existing changeable message signs at Locations 1, 8, and 11 would not be updated or include other transportation management system elements such as the vehicle detection system, closed-circuit television camera system, highway advisory radio, extinguishable message sign and roadway weather information system. Communication and visibility on State Routes 88 and 89 would remain difficult, especially during severe weather conditions. Safety features such as maintenance vehicle pullouts with a Midwest guardrail system would not be added; the pullouts and guardrail would provide maintenance staff a safe place to park when working on transportation management systems. The No-Build Alternative does not meet the purpose and need because it does not improve communication throughout State Routes 88 and 89 in Amador, El Dorado, and Alpine counties and would not provide roadside safety improvements.

## **1.5 Standard Measures and Best Management Practices Included in All Build Alternatives**

AQ-1 Caltrans Standard Specifications Section 14-9.02, "Air Pollution Control," would be included in the construction contract.

AQ-2 Caltrans Standard Specification 10-5, "Dust Control," would be included in the construction contract.

BIO-1 Caltrans Standard Specifications or Special Provisions Section 14-1.02, "Environmentally Sensitive Area," would be included in the construction contract.

BIO-2 Designated Biologist: A designated biologist would be retained to monitor construction activities and regulated species and habitats; if a contractor-supplied biologist is used, Standard Special Provision 14-6.03D would be included in the construction contract.

BIO-3 Caltrans Special Specifications Section 13-4.03E(3), "Vehicle and Equipment Cleaning," and Caltrans Construction Site Best Management Practices Manual Section NS-08, "Vehicle and Equipment Cleaning," would be included in the construction contract to maintain weed-free construction equipment and vehicles.

BIO-4 Caltrans Standard Specifications Section 20-1.03C(3), "Weed Control," would be included in the construction contract.

BIO-5 Caltrans Standard Specification 21-2.02, "Erosion Control – Materials," would be included in the construction contract. This section specifies what materials can be used for erosion control and revegetation treatments.

BIO-6 Caltrans Standard Special Provision 14-6.03A, “Species Protection,” would be included in the construction contract. This section specifies the conduct of pre-construction surveys and protective buffers for special-status species.

BIO-7 Caltrans Standard Specifications Section 86-1.02M, “Photoelectric Controls,” would be included in the construction contract.

BIO-8 Caltrans Standard Provisions Section 14-6.03B, “Bird Protection,” would be included in the construction contract. This provision requires a focused survey for active nests of protected raptors and migratory birds if construction activities are scheduled during the nesting period, between February 1 and September 30. If active nests are found, a protective buffer and consultation would be established per the specification. A qualified biologist would be required to ensure buffers are maintained.

- Performing ground disturbance, vegetation removal, or other construction activities within nesting bird habitat during the non-nesting season, between October 1 and January 31, would not require pre-construction surveys or nesting bird avoidance measures.

CUL-1 Caltrans Standard Specifications Section 14-2.03A, “Archaeological Resources,” would be included in the construction contract.

GHG-1 Caltrans Standard Specifications Section 7-1.02A, “Legal Relations and Responsibility to the Public – General,” would be added to the construction contract.

GHG-2 Caltrans Standard Specifications 7-1.02C, “Emissions Reduction,” would be added to the construction contract.

GHG-3 The contract would include measures to reduce construction waste and maximize the use of recycled materials.

GHG-4 The contract would include measures to reduce consumption of potable water.

GHG-5 The contract would require the contractor to maintain equipment in proper tune and working condition.

GHG-6 The contract would require that the contractor have the right size equipment for the job.

GHG-7 The contract would require that existing project materials would be recycled or reused onsite to the extent feasible.

HW-1 Caltrans Standard Special Provision 7-1.-02K(6)(j)(iii), “Earth Material Containing Lead,” would be added to the construction contract. A lead compliance plan would be required.

HW-2 Caltrans Standard Special Provision 14-11.14 “Treated Wood Waste,” would be required if disposal of treated wood waste is needed.

LG-1 Caltrans Standard Specifications Section 86-1.02K, “Luminaries,” would be included in the construction contract. This section specifies lighting requirements.

NQ-1 Caltrans Standard Specification 14-8.02, “Noise Control,” would be included in the construction contract.

NQ-2 All equipment would have sound-control devices that are no less effective than those provided on the original equipment.

PAL-1 Caltrans Standard Specification 14-7.03, “Discovery of Unanticipated Paleontological Resources,” would be included in the construction contract.

WF-1 Caltrans Standard Specification 7-1.02M (2) mandates fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts during construction.

WQ-1 Caltrans Standard Specification 13-1, “Water Pollution,” would be included in the construction contract.

## 1.6 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, has been prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

## 1.7 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for project construction:

Agency	Permit/Approval	Status
U.S. Forest Service	Permanent Easement	Approved

## Chapter 2 CEQA Evaluation

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### 2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A “No Impact” answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

#### 2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated September 26, 2023, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	<b>Less Than Significant Impact</b>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<b>Less Than Significant Impact</b>

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 a 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?	<b>Less Than Significant Impact With Mitigation Incorporated</b>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<b>Less Than Significant Impact</b>

### ***Affected Environment***

The proposed project includes six locations along State Routes 88 and 89 in Amador, El Dorado, and Alpine counties. State Routes 88 and 89 are mainly rural roads with natural features such as rugged mountain passes, dense forests, and open meadows. State Route 88 is dually designated as a State Scenic Highway and a U.S. Forest Service National Forest Scenic Byway. State Route 89 is designated as a State Scenic Highway at select areas within Alpine and El Dorado counties within the project limits.

A Visual Impact Assessment was completed for this project on September 26, 2023. The Visual Impact Assessment follows guidance outlined by the Federal Highway Administration. Key views were identified at each project location to analyze visual resource change, viewer response, and lighting, which are further described below. The full Visual Impact Assessment is provided in Volume 2 of this document.

#### ***Visual Impact Level***

Visual impacts are determined by assessing changes to visual resources and predicting viewer response to those changes and assigning a value. Those values are then combined to assign a visual impact level.

#### ***Visual Resource Change***

Visual resource change is assessed by evaluating the visual character and quality of the resources in the project corridor, both before and after construction of the proposed project. Visual character includes primary visual attributes of objects, including form, line, color, and texture, as well as the contrast between the object and the surrounding visual environment, including dominance, scale, diversity, and continuity. Changes to visual character are identified by how visually compatible the proposed project would be with the existing condition. Visual quality is evaluated by identifying the vividness, intactness, and unity in the project corridor, or rather, how memorable, distinctive, intact, and coherent the elements in the corridor are.



### *Viewer Response*

Viewers are the population affected by the project and include highway users and highway neighbors. Viewer response is a measure of viewer reaction to changes in the visual environment, defined by viewer exposure and viewer sensitivity. Viewer exposure measures the viewer's ability to see an object, including location, quantity of viewers, and duration an object is in view. Viewer sensitivity is a measure of the viewer's recognition of a particular object, including the activity the viewer is engaged in when looking at the object, the specificity of the viewer's awareness, and the local values and attitudes toward aesthetics.

### *Key Views*

Key views are viewpoints that are seen by those driving on the road (in either direction) or seen by those who live near the project area (neighbors). Key views were identified for each project location and were analyzed using visual resource change and viewer response criteria. Key views were selected to demonstrate the level of change to visual resources caused by the proposed project and were analyzed at each project location.

#### *Location 1 – Amador 88, post mile R38.24*

Location 1 is in a dense, wooded conifer forest. This area has the visual character of a rural forest, which dominates the viewshed. The vertical lines of the forest edge are coarse and homogenous in color and form. Urban elements are visible but do not impede views.

#### *Location 2 – Amador 88, post mile 53.99*

Location 2 is in a moderately dense, wooded conifer forest. The visual character of this location is rural forest that dominates the viewshed with moderately dense roadside vegetation. The vertical lines of the forest edge are coarse and homogenous in color and form. Urban elements are visible but do not impede views. Location 3 is visible from this location.

#### *Location 3 – Amador 88, post mile 54.11*

Location 3 is in a moderately dense, wooded conifer forest. The visual character of this location is rural forest that dominates the viewshed with moderately dense roadside vegetation. The vertical lines of the forest edge are coarse and homogenous in color and form. Urban elements are visible in this location but do not impede views. Location 2 is visible from this location.

#### *Location 7 – Alpine 88, post mile 2.30*

Location 7 is in an area that transitions from moderately dense to moderately sparse rural wooded coniferous forest. The visual character is rural forest that dominates the viewshed with moderately dense roadside vegetation. The vertical lines of the forest edge are coarse and homogenous in color and form. Urban elements are visible but do not impede views.

Location 8 – El Dorado 89, post mile 8.39

Location 8 is in a moderately dense, wooded coniferous forest. The visual character is mountainous landform with human-made, residential, and commercial landcover within a moderately dense pinion forest near the community of Meyers, California. Views in this area are punctuated by scenes to existing human-made development visible where the forest vegetation is sparse. The vertical lines of the forest edge are coarse and homogenous in color and form.

Location 11 – Alpine 88, post mile 24.94

Location 11 is in the rural upper desert sagebrush scrub and alluvial pasturelands of the Carson River Valley. The visual character is represented by spatially open, upper flat river valleys. The views are an array of uninterrupted background scenes of the surrounding eastern Sierra Mountain ridges that define the valley limits. Human-made development is present in the form of large parcel dwellings or ranches, some of which can be viewed from the roadway. Urban elements are visible along the roadway and within the project location.

*Lighting*

The proposed project includes three locations in Amador County, one location in El Dorado County, and two locations in Alpine County. All three counties include lighting ordinances to reduce unnecessary lighting and to preserve nighttime views. The Environmental Consequences section will describe the visual change, viewer response, and anticipated impacts if the project is constructed.

**Environmental Consequences**

The visual impact level is the overall average rating per each project location. The ratings range from high, moderately high, moderate, moderately low, and low. The following is a description of each impact rating:

- High – A visual impact rating of “high” indicates a high level of negative change to a visual resource or a high level of viewer response to the change of a visual resource.
- Moderately High – A visual impact rating of “moderately high” indicates a moderate negative visual resource change with high viewer response or high negative visual resource change with a moderate viewer response.
- Moderate – A “moderate” visual impact rating denotes moderate negative change to the visual resource with moderate visual response.
- Moderately Low – A “moderately low” impact rating denotes low negative change to the visual resource with a moderate viewer response, or moderate negative change to the resource with low viewer response.
- Low – A “low” impact score denotes a low negative change to existing visual resources, with low viewer response to that change.

Below is an analysis of each location and the visual impact level per location. Table 2-1 lists the visual impact rating for each location. See the Visual Impact Assessment in Volume 2 for a more detailed description of the rating process.

**Table 2-1 Visual Impact Rating per Location**

Location	County	State Route	Post Mile	Proposed Work	Visual Impact Rating
1	Amador	88	R38.24	Install one vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail and replace existing changeable message sign with an updated changeable message sign.	Moderate
2	Amador	88	53.99	Install one streetlight.	Moderate
3	Amador	88	54.11	Install one changeable message sign with controller cabinets, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio system, two extinguishable message signs, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail.	Moderate
7	Alpine	88	2.30	Install one vehicle detection system.	Moderately Low
8	El Dorado	89	8.39	Install one vehicle detection system, one closed-circuit television camera system, one highway advisory radio system, one extinguishable message sign, and one maintenance vehicle pullout.  Replace the existing metal beam guardrail with Midwest guardrail and replace the existing changeable message sign with an updated changeable message sign.	Moderate
11	Alpine	88	24.94	Install one closed-circuit television camera system, one highway advisory radio system, two extinguishable message signs, and one guide sign.  Replace the existing changeable message sign with an updated message sign.	Moderately High

*Location 1 – Amador 88, post mile R38.24*

The project proposes to install one vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout; replace the existing metal beam guardrail with Midwest guardrail; and replace the existing changeable message sign with an updated changeable message sign at Location 1.

The project would not alter existing views, but some change would occur due to the addition of transportation management system elements and safety improvements. There are no highway neighbors with direct visual access to the site, but there are highway users who move quickly through the site. Transportation management system elements, including a changeable message sign, already exist at this location, and it is anticipated that post-construction views would remain similar to pre-construction views.

The resulting visual impact rating for Location 1 is “moderate.” Proposed project work would not substantially affect scenic features such as rugged mountain passes, extended ridgelines, granite peaks, steeply sloped monolithic rock faces and outcrops, alpine forest landcover, open space pastures, low-lying valleys, or lush meadows bounded by forest trees. Avoidance and minimization measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

*Location 2 – Amador 88, post mile 53.99*

The project proposes to install one streetlight at Location 2.

The project would not alter existing views, but minimal change would occur due to the addition of the streetlight. There are no highway neighbors with direct visual access to the project location. There are highway users who travel quickly through this project location. Transportation management system elements already exist, and post-construction views are expected to remain similar to pre-construction views. This location is within view of Location 3 and across the highway from the Peddler Hill Maintenance Station access roadway, which has existing overhead lighting.

The resulting visual impact rating for Location 2 is “moderate.” Proposed project work would not substantially affect scenic features such as rugged mountain passes, extended ridgelines, granite peaks, steeply sloped monolithic rock faces and outcrops, alpine forest landcover, open space pastures, low-lying valleys, or lush meadows bounded by forest trees. Avoidance and minimization measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

*Location 3 – Amador 88, post mile 54.11*

The project proposes to install one changeable message sign with controller cabinets, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio system, two extinguishable message signs, and one maintenance vehicle pullout; and replace the existing metal beam guardrail with Midwest guardrail.

The project would not alter existing views, but some change would occur due to the introduction of safety improvements and non-typical, above-ground elements, such as the changeable message sign and extinguishable message sign. There are no highway neighbors with direct visual access to the project location, but there are highway users who move quickly through the project location. Views to the proposed transportation management system elements would be visible only from the roadway. Location 3 is along the same visual corridor as Location 2.

The resulting visual impact rating for Location 3 is “moderate.” Proposed project work would not substantially affect scenic features such as rugged mountain passes, extended ridgelines, granite peaks, steeply sloped monolithic rock faces and outcrops, alpine forest landcover, open space pastures, low-lying valleys, or lush meadows bounded by forest trees. Avoidance and minimization measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

*Location 7 – Alpine 88, post mile 2.30*

The project proposes to install one vehicle detection system at Location 7.

The project would not alter existing views, but minimal change would occur due to the addition of transportation management system elements. The project would install a single, above-ground cabinet that is expected to cause little change to the overall visual environment. There are no highway neighbors with visual access to the project location, but there are highway users who move quickly through the project site.

The resulting visual impact for Location 7 is “moderately low.” Proposed project work would not substantially affect scenic features such as rugged mountain passes, extended ridgelines, granite peaks, steeply sloped monolithic rock faces and outcrops, alpine forest landcover, open space pastures, low-lying valleys, or lush meadows bounded by forest trees. Avoidance and minimization measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

*Location 8 – El Dorado 89, post mile 8.39*

The project proposes to install one vehicle detection system, one closed-circuit television camera system, one highway advisory radio system, one extinguishable message sign, and one maintenance vehicle pullout; replace the existing metal beam guardrail with Midwest guardrail; and replace the existing changeable message sign with an updated changeable message sign at Location 8.

The project would not alter existing views, but some change would occur due to the addition of transportation management system elements and safety improvements. Certain transportation management system elements, such as the changeable message sign, already exist at this location, and post-construction views are expected to remain similar to pre-construction views, with the addition of an extinguishable message sign. There are four highway neighbors residing near the proposed facility who have or would have visual access to the project site. The closest neighbor is approximately 150 feet from the site, and the farthest is approximately 500 feet away. There are also highway users that move quickly through the project area. As previously mentioned, most of the elements already exist, and views to the transportation management system elements would be accessible to highway users. The elements are somewhat compatible with the existing residential and commercial land uses in the area.

The resulting visual impact for Location 8 is “moderate.” Proposed project work would not substantially affect scenic features such as deep rugged canyons, mountain passes, views to the upper desert geology, open desert vegetation that transitions to thick pinion forests, roadside views to the East Fork Carson River, mountain ridgelines and rocky peaks, steeply sloped monolithic rock faces and outcrops, linear open space valleys, meadows defined by the forest edge, and skyline features of distant mountain ranges that define the horizon. Avoidance and minimization measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

*Location 11 – Alpine 88, post mile 24.94*

The project proposes to install one closed-circuit television camera system, one highway advisory radio system, two extinguishable message signs, and one guide sign; and replace the existing changeable message sign with an updated message sign at Location 11.

The existing views would remain the same with some change occurring due to the installation of the extinguishable message signs and guide sign. There is an existing changeable message sign at this location. There is one highway neighbor immediately adjacent to the project location. The highway neighbor has a direct view of the existing transportation management elements. There are four other residents who live near the project site but who do not have

visual access to the project site; the closest of these neighbors is located 2,200 feet from the site. There are also highway users who move quickly through the project site.

The resulting visual impact for Location 11 is “moderately high.” Proposed project work would not substantially affect scenic features such as rugged mountain passes, extended ridgelines, granite peaks, steeply sloped monolithic rock faces and outcrops, alpine forest landcover, open space pastures, low-lying valleys, or lush meadows bounded by forest trees. Mitigation measures have been proposed to further lessen visual impacts and are discussed under Avoidance, Minimization, and/or Mitigation Measures.

### *Lighting*

The project proposes to add new sources of lighting at Locations 1, 2, 3, 8, and 11. Sources of lighting involved in the project include a streetlight, changeable message signs, extinguishable message signs, and Locations 1, 2, 8, and 11 already have existing sources of lighting. Location 3 has no existing lighting; however, it is within view of Location 2, which currently has an overhead light. Installation of a new changeable message sign and an extinguishable message sign would still introduce a new source of light for Location 3.

Caltrans includes Standard Specifications with regard to light color, temperature, and shielding in all construction contracts. It is recommended that temporary outdoor construction lighting and outdoor permanent roadway and signal lighting have color temperatures under 3,000 Kelvin, and preferably under 2,700 Kelvin. Changeable message sign light-emitting diode luminaries, also known as LED lights, are amber in color and under 3,000 Kelvin. Also, Caltrans specifies that light-emitting diode roadway luminaries, specifically overhead lighting, do not allow more than 2.5 percent of lumens, a measure of visible light, to extend above 80 degrees from the ground. This is consistent with light cutoff classifications set forth by the Illuminating Engineering Society of North America to reduce or eliminate light emitted into the sky. As such, a less than significant impact to views by light or glare would occur.

Avoidance and minimization measures to further reduce light impacts are identified in Avoidance, Minimization, and/or Mitigation Measures below.

### ***Avoidance, Minimization, and/or Mitigation Measures***

This section lists the avoidance, minimization, and mitigation measures proposed for the project. Please see Appendix C for examples of measures that would be applied to the project.

### *Avoidance and Minimization Measures*

Due to the moderate visual impact rating for Locations 1, 2, 3, and 8, the following measures would apply. Only measures AES-2 and AES-4 would apply to Location 7 due to the moderately low visual impact rating.

AES-1 Install conventional highway planting in strategic locations to limit visual intrusion from transportation management system elements within highway viewshed and provide watering schedule to ensure plant establishment success.

AES-2 Install non-irrigated native plant material seeding with duff top-dress covering all disturbed soil areas including the proposed construction site and equipment staging area.

AES-3 Choose lighting types that direct light downward and install shield fixtures to all additional light sources to minimize light trespass into nighttime skies.

AES-4 Paint and/or stain, using Natina stain, changeable message structure and accessories to match existing visual surroundings.

AES-5 Stain new Midwest guardrail system, using Natina stain, to match existing visual surroundings.

AES-6 Provide a minimum three-year vegetation establishment period.

The following measures to reduce lighting impacts would apply to Locations 1, 2, 3, 8, and 11:

LG-2 Lighting must comply with all pertinent county ordinances and standards along with consideration to the International Dark-Sky Association (IDA)–approved lighting standards and fixtures.

LG-3 All lighting must be designed to have minimum impact on the surrounding environment and must be downcast, cutoff-type fixtures that are shielded and direct the light downward only toward objects or surfaces requiring illumination (when needed).

LG-4 Lights must be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental spill-light onto adjacent properties or open spaces and minimize backscatter or sky glow into the nighttime sky in an attempt to eliminate nighttime light pollution.

LG-5 The lowest allowable wattage must be used for all new light sources in or near scenic resource areas identified in this document and documented in pertinent county guidelines and policies. The number of nighttime light sources proposed for dark landscape areas must be minimized.



LG-6 Light fixtures must have non-glare finishes that will not cause reflective daytime glare.

LG-7 Lights must provide good color rendering with natural light qualities, with the minimum intensity needed for security, safety, and personnel access.

### *Mitigation Measures*

Due to the moderately high visual impact rating for Location 11, the following mitigation measures would be applied:

MIT-1 Install conventional highway planting in strategic locations to limit visual intrusion from transportation management system elements within highway viewshed and provide watering schedule to ensure plant establishment success.

MIT-2 Install non-irrigated native plant material seeding with duff top-dress covering all disturbed soil areas including the proposed construction site and equipment staging area.

MIT-3 Choose lighting types that direct light downward and install shield fixtures to all additional light sources to minimize light trespass into nighttime skies.

MIT-4 Paint and/or stain, using Natina stain, changeable message structure and accessories to match existing visual surroundings.

MIT-5 Stain new Midwest guardrail system, using Natina stain, to match existing visual surroundings.

MIT-6 Provide a minimum three-year vegetation establishment period.

## **2.1.2 Agriculture and Forestry Resources**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

A permanent easement totaling 0.063 acre from the U.S. Forest Service would be required at Location 2. Location 2 is located within the El Dorado National Forest. There is an existing easement in place between the U.S. Forest Service

and Caltrans at this location, and the easement would not constitute a change in zoning. In a letter to Caltrans Right of Way staff dated April 18, 2022, the U.S. Forest Service Amador District Ranger indicated that the U.S. Forest Service had previously conducted environmental analysis at the area and indicated that there are no known potential adverse effects to resources as a result of this project. This project would not require temporary construction easements or permanent right of way acquisition at any location. Considering this information, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Agriculture and Forest Resources</b>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<b>No Impact</b>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<b>No Impact</b>
c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<b>No Impact</b>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<b>No Impact</b>
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?	<b>No Impact</b>

### 2.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

An Air Quality Memorandum was prepared for this project. The project is not expected to cause any operational effects on air pollutants, but construction of the project would temporarily generate air pollutants. Caltrans includes Standard Specifications in each construction contract, as identified in Section 1.5. Considering the information in the Air Quality Memorandum dated August 29, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Air Quality</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<b>No Impact</b>
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?	<b>No Impact</b>
c) Expose sensitive receptors to substantial pollutant concentrations?	<b>No Impact</b>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<b>No Impact</b>

#### 2.1.4 Biological Resources

Considering the information in the Natural Environment Study (Minimal Impacts) dated August 31, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Biological Resources</b>
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 Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	<b>Less than Significant</b>

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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 Wildlife or U.S. Fish and Wildlife Service?	<b>No Impact</b>
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?	<b>No Impact</b>
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?	<b>No Impact</b>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<b>No Impact</b>
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?	<b>No Impact</b>

### ***Affected Environment***

A Natural Environment Study (Minimal Impacts) was completed on August 31, 2023. Environmental study limits, which include all areas that may be directly or indirectly affected by the project, were identified in the study. The project is located within the California Sierra Nevada province. As the project locations are varied, there is a mix of vegetation communities within and adjacent to the project locations, including Sierran Mixed Conifers, Lodgepole Pine, East Side Pine, Montane Riparian, Wet Meadow, and Pasture.

### ***Waters of the United States and Waters of the State of California – Wetlands and Other Waters***

Location 7 is 20 feet west of a culvert that carries an intermittent stream. The intermittent stream potentially qualifies as waters of the United States and/or waters of the State of California under the jurisdiction of the Clean Water Act, Sections 401 and 404, and the California Fish and Game Code Sections 1600-1616.

### *Special-Status Plant Species*

A list of special-status plant species considered as part of the evaluation is included in the Natural Environment Study (Minimal Impacts), available in Volume 2 of this document. No sensitive plant species considered for review were detected during botanical surveys, and none are expected to occur within the project environmental study limits.

### *Invasive Species*

Annual grasses and forbs that are components of common ruderal vegetation along mountainous disturbed roadside and non-landscaped areas in the environmental study limits are considered invasive plant species. These include species rated by the California Invasive Plant Council as plants of “limited” or “moderate” invasiveness. No invasive plants from the California Department of Fish and Wildlife Invasive Species Program are expected to occur in the project environmental study limits.

### *Special-Status Animal Species*

A list of special-status animal species is included in the Natural Environment Study, available in Volume 2 of this document. No sensitive animal species considered for this review were detected during surveys of the environmental study limits.

Habitat for the following species is not available within the immediate vicinity of the project area:

Carson wandering skipper, southern long-toed salamander, mountain sucker, delta smelt, black swift, amphibious caddisfly, Mono checkerspot butterfly, gray-headed pika, Lahontan cutthroat trout, mountain whitefish, foothill yellow-legged frog, California red-legged frog, and Yosemite toad

Potential habitat for the following species may be present within and adjacent to the project area:

northern goshawk, Morrison bumblebee, western bumblebee, Carson valley silverspot, monarch butterfly, California wolverine, Sierra Nevada mountain beaver, tree-roosting bats, Sierra marten, fisher, North American porcupine, western white-tailed jackrabbit, black-backed woodpecker, great grey owl, Sierra Nevada red fox, American badger, and migratory birds

### *Common Fish and Wildlife*

Suitable nesting habitat for migratory birds, including raptors, occurs within the environmental study limits, and the birds may attempt to nest in appropriate habitats between February 1 and September 30. Within the project area, the potential to encounter nesting migratory birds between these

dates is moderate. The project does not fall within any areas identified by the California Essential Habitat Connectivity Project as Natural Landscape Blocks or Essential Habitat Connectivity Areas, though these areas occur adjacent to some of the project locations. The project is located beyond the range of anadromous fish species; no waters designated as Essential Fish Habitat by the National Marine Fisheries Service occur within the project environmental study limits.

### ***Environmental Consequences***

#### ***Waters of the United States and Waters of the State of California – Wetlands and Other Waters***

The project would install a vehicle detection system at Location 7. Installation would require shallow excavation of the roadbed and adjacent shoulder to install inductive loop detectors. Caltrans Standard Plans denote that all electrical conduit runs are installed within 10 feet of the edge of pavement. Conduit may be installed along the edge of pavement or under paved shoulder areas if necessary.

The potential waters of the United States and waters of the State of California would be designated as Environmentally Sensitive Areas on the project's plans and specifications and delineated in the field with high-visibility markers. All auguring, trenching, and other excavation activities at Location 7 would be limited to the edge of shoulder. No project work is proposed that may impact the intermittent stream adjacent to Location 7, and no Clean Water Act Section 404, Clean Water Act Section 401, and/or California Fish and Game Section 1600 permits would be required.

#### ***Special-Status Plant Species***

Due to the project area being outside the range of special-status plant species considered for environmental review, the lack of suitable habitat or habitat components within the area, the lack of detection during Caltrans surveys, and because the project would not harm individuals or alter species habitat, Caltrans has determined that the project would have "no effect" on federally or state listed species, California "rare" plant species, or plant species protected by the California Native Plant Protection Act.

#### ***Invasive Species***

Though existing roadside areas would be temporarily disturbed, the project would not break new ground to be potentially available for new infestations. However, it is possible that weeds originating from the project area could be transported to areas without invasive species. Caltrans implements standard measures on every project to reduce the potential for the project to spread invasive or noxious weeds, as listed in Section 1.5.

### *Special-Status Animal Species*

The project proposes to install or replace light features at four locations that have existing light features, and to install light features at Location 3, which has no existing light features. Location 7 has existing light features, and the project is not proposing additional light features at that location. The presence of artificial light in otherwise dark conditions, including glare, skyglow, light spillage, clutter, and over-illumination, may impact natural ecosystems.

Locations 2 and 8 have existing streetlights, also referred to as overhead lighting. Other existing or proposed lighting elements at these locations are expected to fall within the lighting footprint of the overhead lights. The installation of overhead lighting at Location 2 and installation of extinguishable message signs at Location 8 are expected to have a negligible impact due to being within the light footprint of existing lighting.

Installation of a new changeable message sign and extinguishable message sign at Location 3 would introduce a new, “on the ground” light footprint, however, Location 3 is approximately 625 feet east of Location 2, which is currently illuminated by overhead lights.

The installation of an extinguishable message sign at Location 11 would extend the “on the ground” light footprint beyond the existing changeable message sign light footprint. Extinguishable message signs are expected to have a comparable light footprint as changeable message signs. Light spillage to ground surfaces is expected to be negligible.

Existing lighting conditions at Locations 1, 2, 7, 8, and 11 are assumed to currently extend into migration routes, flyways, or foraging areas for sensitive animal species. The project has little potential to result in additional negative effects if species are present. Standard measures, which are a feature of all or most projects, would reduce potential impacts.

The following species have no habitat within the immediate vicinity of the project area; therefore, it is anticipated that the project would not result in the “take” (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) of these species:

Carson wandering skipper, southern long-toed salamander, mountain sucker, delta smelt, black swift, amphibious caddisfly, Mono checkerspot butterfly, gray-headed pika, Lahontan cutthroat trout, mountain whitefish, foothill yellow-legged frog, California red-legged frog, and Yosemite toad

The following species have habitat within the immediate vicinity of the project area, however with the inclusion of standard measures listed in Section 1.5, it is anticipated that the project would not result in the take of these species:

northern goshawk, Morrison bumblebee, western bumblebee, Carson valley silverspot, monarch butterfly, California wolverine, Sierra Nevada mountain beaver, tree-roosting bats, Sierra marten, fisher, North American porcupine, western white-tailed jackrabbit, black-backed woodpecker, great grey owl, Sierra Nevada red fox, American badger and migratory birds

Avoidance and minimization measures are included in the project to further reduce impacts.

#### *Common Fish and Wildlife*

Common wildlife species may be impacted due to the installation of new light sources, as discussed above under “Special-Status Animal Species.” With the inclusion of standard measures, the project is not expected to result in the take of migratory birds or active nests. Avoidance and minimization measures are included in the project to further reduce impacts.

The project would not result in adverse impacts to fish species or result in the construction of any features potentially limiting fish passage within the environmental study limits. Project construction activities would also avoid disturbance of natural vegetation communities and habitats supporting common wildlife species. The proposed construction activities are not expected to result in the take of common wildlife species.

#### ***Avoidance, Minimization, and/or Mitigation Measures***

The following standard measures, also listed in Section 1.5 of this document, would be included in the project.

WQ-1 Caltrans Standard Specification 13-1, “Water Pollution,” would be included in the construction contract.

BIO-1 Caltrans Standard Specifications or Special Provisions Section 14-1.02, “Environmentally Sensitive Area,” would be included in the construction contract.

BIO-2 Designated Biologist: A designated biologist would be retained to monitor construction activities and regulated species and habitats; if a contractor-supplied biologist is used, Standard Special Provision 14-6.03D would be included in the construction contract.

BIO-3 Caltrans Special Specifications Section 13-4.03E(3), “Vehicle and Equipment Cleaning,” and Caltrans Construction Site Best Management Practices Manual Section NS-08, “Vehicle and Equipment Cleaning,” would be included in the construction contract to maintain weed-free construction equipment and vehicles.

BIO-4 Caltrans Standard Specifications Section 20-1.03C(3), “Weed Control,” would be included in the construction contract.



BIO-5 Caltrans Standard Specification 21-2.02, "Erosion Control – Materials," would be included in the construction contract. This section specifies what materials can be used for erosion control and revegetation treatments.

BIO-6 Caltrans Standard Special Provision 14-6.03A, "Species Protection," would be included in the construction contract. This section specifies the conduct of pre-construction surveys and protective buffers for special-status species.

BIO-7 Caltrans Standard Specifications Section 86-1.02M, "Photoelectric Controls," would be included in the construction contract.

BIO-8 Caltrans Standard Provisions Section 14-6.03B, "Bird Protection," would be included in the construction contract. This provision requires a focused survey for active nests of protected raptors and migratory birds if construction activities are scheduled during the nesting period, between February 1 and September 30. If active nests are found, a protective buffer and consultation would be established per the specification. A qualified biologist would be required to ensure buffers are maintained.

- Performing ground disturbance, vegetation removal, or other construction activities within nesting bird habitat during the non-nesting season, between October 1 and January 31, would not require pre-construction surveys or nesting bird avoidance measures.

LG-1 Caltrans Standard Specifications Section 86-1.02K, "Luminaries," would be included in the construction contract. This section specifies lighting requirements.

The following avoidance and minimization measures would be included in the project:

LG-3 All lighting must be designed to have minimum impact on the surrounding environment and must be downcast, cutoff-type fixtures that are shielded and direct the light downward only toward objects or surfaces requiring illumination (when needed).

LG-4 Lights must be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental spill-light onto adjacent properties or open spaces and minimize backscatter or sky glow into the nighttime sky in an attempt to eliminate nighttime light pollution.

LG-5 The lowest allowable wattage must be used for all new light sources in or near scenic resource areas identified in this document and documented in pertinent county guidelines and policies. The number of nighttime light sources proposed for dark landscape areas must be minimized.

LG-6 Light fixtures must have non-glare finishes that will not cause reflective daytime glare.

LG-7 Lights must provide good color rendering with natural light qualities, with the minimum intensity needed for security, safety, and personnel access.

No biological mitigation measures are proposed for this project.

### 2.1.5 Cultural Resources

A Historic Property Survey Report was prepared for the project on September 2, 2021 and was amended on August 30, 2023. No cultural sites were identified within the area of potential effect for Locations 1, 2, 3, 7, 8, or 11. A finding of No Historic Properties Affected was adopted for the project. Standard measures relating to cultural resources that would be included in the project are identified in Section 1.5. Considering the information in the Historic Property Survey Report dated September 2, 2021, and the Section 106 Memorandum dated August 30, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<b>No Impact</b>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<b>No Impact</b>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<b>No Impact</b>

### 2.1.6 Energy

The proposed project scope would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary use of energy resources. The transportation management system elements would be connected to existing utility lines at each project location. Also, the project would improve energy efficiency by replacing existing changeable message signs with an energy-efficient version. The new signs would typically run on less than half of the maximum power required (depending on the message); the signs would have a power savings mode and internal fans to keep the signs at an ambient temperature on hot days, and (when on) the new signs would use the same wattage as a small microwave. The Meyers Area Plan, Alpine and Amador County Energy Action Plans mention goals for including energy-efficient design features in new projects. Furthermore, the changeable message signs use light-emitting diode amber lights, which are indicated as energy-efficient light bulbs in the Alpine and Amador County Energy Action

Plans. The changeable message signs would be on only when advance warning is required regarding roadway conditions that could affect the traveling public, such as severe weather, work zones or roadwork, and special events; otherwise, the signs would be off. Considering the information in the energy evaluation dated September 11, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Energy</b>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<b>No Impact</b>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<b>No Impact</b>

### 2.1.7 Geology and Soils

The California Earthquake Hazards Zone Application, accessed September 13, 2023, was consulted for this project. Location 11 is located within 1.5 miles of the Genoa Fault. However, the project activities at this location are not anticipated to cause a rupture of the fault due to the limited scope of work. Also, the project is not anticipated to impact soils, or paleontological or geological features. Standard measures relating to cultural resources that would be included in the project are identified in Section 1.5. Considering this information and information in the Paleontological Identification Report dated September 15, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Geology and Soils</b>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<b>No Impact</b>
ii) Strong seismic ground shaking?	<b>No Impact</b>
iii) Seismic-related ground failure, including liquefaction?	<b>No Impact</b>

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Geology and Soils</b>
iv) Landslides?	<b>No Impact</b>
b) Result in substantial soil erosion or the loss of topsoil?	<b>No Impact</b>
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<b>No Impact</b>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<b>No Impact</b>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<b>No Impact</b>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<b>No Impact</b>

### 2.1.8 Greenhouse Gas Emissions

Considering the information in the Amended Climate Change and Greenhouse Gas Analysis Memorandum dated August 29, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Greenhouse Gas Emissions</b>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<b>Less Than Significant Impact</b>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<b>No Impact</b>

### ***Affected Environment***

The project has six locations on State Routes 88 and 89 in Amador, El Dorado, and Alpine counties. Set within three different National Forests (Stanislaus National Forest, Humboldt-Toiyabe National Forest, and El

Dorado National Forest), the project area is mainly rural with natural resources and a tourism-based economy. State Routes 88 and 89 are considered the regions collector routes by providing access to incorporated communities and major rural residential areas throughout the region. The Amador County General Plan, El Dorado County Regional Transportation Plan, and Alpine County General Plan address climate change and greenhouse gases in the project area.

### ***Environmental Consequences***

The project is anticipated to temporarily generate greenhouse gas emissions during construction due to material processing and transportation, onsite construction equipment, and possible traffic delays from construction. Temporary carbon dioxide emissions generated from construction equipment were estimated using the Caltrans Construction Emission Tool. The estimated carbon dioxide emissions for the project would be about 971 tons during 180 working days.

### ***Avoidance, Minimization, and/or Mitigation Measures***

The following standard measures would be implemented for the project to reduce greenhouse gas emissions and potential climate change impacts from the project.

GHG-1 Caltrans Standard Specifications Section 7-1.02A, “Legal Relations and Responsibility to the Public – General,” would be added to the construction contract.

GHG-2 Caltrans Standard Specifications 7-1.02C, “Emissions Reduction,” would be added to the construction contract.

GHG-3 The contract would include measures to reduce construction waste and maximize the use of recycled materials.

GHG-4 The contract would include measures to reduce consumption of potable water.

GHG-5 The contract would require the contractor to maintain equipment in proper tune and working condition.

GHG-6 The contract would require that the contractor have the right size equipment for the job.

GHG-7 The contract would require that existing project materials would be recycled or reused onsite to the extent feasible.

AQ-1 Caltrans Standard Specifications Section 14-9.02, “Air Pollution Control,” would be included in the construction contract.

### 2.1.9 Hazards and Hazardous Materials

An Initial Site Assessment was prepared for this project. The project is not expected to impact or encounter leaking underground storage tanks, naturally occurring asbestos, asbestos-containing material, lead-based paint, treated wood waste, or yellow striping. The Initial Site Assessment identified the potential to encounter non-hazardous concentrations of aerially deposited lead in unpaved areas within the project limits. The construction contract would include standard measures, identified in Section 1.5, to address aerially deposited lead and treated wood waste. Considering the information in the Initial Site Assessment dated September 19, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<b>No Impact</b>
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?	<b>No Impact</b>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<b>No Impact</b>
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?	<b>No Impact</b>
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?	<b>No Impact</b>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<b>No Impact</b>

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Hazards and Hazardous Materials</b>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<b>No Impact</b>

### 2.1.10 Hydrology and Water Quality

A Water Compliance Memorandum and Preliminary Location Floodplain Study were prepared for this project. The project does not propose in-channel work in waterways, and long-term water quality impacts are not anticipated. The project has the potential for temporary impacts to water quality during construction. Caltrans includes specifications in every construction project to address potential temporary impacts to water during construction. This specification is listed in Section 1.5 as a standard measure that would be included in the project. Considering the information in the Water Compliance Memorandum dated September 8, 2023 and Preliminary Location Floodplain Study dated March 25, 2021, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Hydrology and Water Quality</b>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	<b>No Impact</b>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<b>No Impact</b>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:  (i) result in substantial erosion or siltation onsite or offsite;	<b>No Impact</b>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	<b>No Impact</b>

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Hydrology and Water Quality</b>
(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	<b>No Impact</b>
(iv) impede or redirect flood flows?	<b>No Impact</b>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<b>No Impact</b>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<b>No Impact</b>

### 2.1.11 Land Use and Planning

The project would not change the land use within Amador, El Dorado, or Alpine counties. The project would not open new areas to development because all project work would remain within the existing State right-of-way or within an existing easement with the U.S. Forest Service and therefore would not divide any established communities. In a letter to Caltrans Right of Way staff dated April 18, 2022, the U.S. Forest Service Amador District Ranger indicated that the U.S. Forest Service had previously conducted environmental analysis at the area and indicated that there are no known potential adverse effects to resources as a result of this project. The proposed project is consistent with the Amador, El Dorado, and Alpine counties land use policies. Considering the information in the Community Impact Assessment Memorandum dated September 1, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Land Use and Planning</b>
a) Physically divide an established community?	<b>No Impact</b>
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?	<b>No Impact</b>



### 2.1.12 Mineral Resources

The California Geological Survey's Mineral Land Classification map was reviewed for the project. The project locations are not indicated as areas with mineral lands classification. In addition, the project scope is within an existing transportation facility under State right of way or easement, not a mineral resource recovery site. Considering the information in the California Geological Survey's Mineral Land Classification map, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Mineral Resources</b>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<b>No Impact</b>
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?	<b>No Impact</b>

### 2.1.13 Noise

A Noise Compliance Memorandum was prepared for the project. The project would not introduce any potential for long-term traffic noise impacts. Caltrans includes specifications for noise control on every construction project. Such measures are included in Section 1.5 as standard project measures. Considering the information in the Noise Compliance Memorandum dated August 30, 2023, the following significance determinations have been made:

<b>Question—Would the project result in:</b>	<b>CEQA Significance Determinations for Noise</b>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<b>No Impact</b>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<b>No Impact</b>
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	<b>No Impact</b>

airport, would the project expose people residing or working in the project area to excessive noise levels?	
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#### 2.1.14 Population and Housing

Based on the project scope, the proposed project would not change the current land use within the project area, nor would it attract development to the study area. The project would occur within an existing facility and would not increase capacity or increase accessibility through the extension of roads or other infrastructure. The project would not require the relocation of residents or a need for replacement housing elsewhere. Considering the information in the Community Impact Assessment Memorandum dated September 1, 2023, and considering the current project scope, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<b>No Impact</b>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<b>No Impact</b>

#### 2.1.15 Public Services

The project scope would not result in potentially significant environmental impacts to public or emergency services and facilities. Temporary traffic impacts would only occur during construction in the form of one-lane traffic control. Caltrans has an emergency service plan to allow access when emergency service vehicles must pass. It is recognized that the project area is located adjacent to open forest and National Forest areas that can be used for recreation such as camping, hiking, and biking. The contractor would be aware of provisions and specifications that pertain to pedestrian, bicycle, and first responders. A traffic management plan would be created in the Plans, Specifications, and Estimates phase and implemented in construction. Construction at each location would occur only during weekdays, and night work would be required. Considering the information in the Community Impact Assessment Memorandum dated September 1, 2023, and considering the current project scope, the following significance determinations have been made:

<b>Question:</b>	<b>CEQA Significance Determinations for Public Services</b>
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?	<b>No Impact</b>
Police protection?	<b>No Impact</b>
Schools?	<b>No Impact</b>
Parks?	<b>No Impact</b>
Other public facilities?	<b>No Impact</b>

### 2.1.16 Recreation

The project would not result in any use of existing parks or recreational areas. It is recognized that the project area is located adjacent to open forest and National Forest areas that can be used for recreation such as camping, hiking, and biking; however, the project would not acquire or change land designation used for parks or recreation and therefore would not impact those resources. Considering the information in the Community Impact Assessment Memorandum dated September 1, 2023, and amended Section 4(f) Memorandum dated September 19, 2023, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Recreation</b>
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?	<b>No Impact</b>

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?	<b>No Impact</b>
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### 2.1.17 Transportation

The project would not conflict with existing transportation programs, plans, ordinances, or policies. The project is not considered a project type that would induce vehicle miles traveled and would not alter the geometric design of the roadway or impede emergency access. During construction, a transportation management plan would be used to minimize impacts to the traveling public. Considering the above information, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Transportation</b>
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<b>No Impact</b>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<b>No Impact</b>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<b>No Impact</b>
d) Result in inadequate emergency access?	<b>No Impact</b>

### 2.1.18 Tribal Cultural Resources

Caltrans contacted the Native American Heritage Commission on September 18, 2020, to request a search of the Commission's Sacred Lands Inventory File and to request a current Native American contact list. The commission reported a negative record search of the Sacred Lands Inventory for the project area and provided a Tribal contact list. Caltrans sent Assembly Bill 52 Project Notification and Initial Section 106 Outreach letters with project location mappings to Tribes on the commission's contact list. The United Auburn Indian Community responded on November 30, 2020, requesting to consult on the project. The Washoe Tribe of Nevada and California, Calaveras Band of Mi-Wuk Indians, and Jackson Rancheria were contacted to consult on archaeological testing that was conducted at Locations 9 and 13, which are no longer part of the project. For a record of consultation,

please refer to the Historic Property Survey Report, available as part of Volume 2 of this document. Considering the information in the Historic Property Survey Report dated September 2, 2021, and amended on August 30, 2023, the following significance determinations have been made:

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:

<b>Question:</b>	<b>CEQA Significance Determinations for Tribal Cultural Resources</b>
a) 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), or	<b>No Impact</b>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<b>No Impact</b>

### 2.1.19 Utilities and Service Systems

Considering the project scope, the following significance determinations have been made:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Utilities and Service Systems</b>
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<b>Less Than Significant Impact</b>

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<b>No Impact</b>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<b>No Impact</b>
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?	<b>No Impact</b>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<b>No Impact</b>

### ***Affected Environment***

The six project locations are in a rural, forested area of Amador, El Dorado, and Alpine counties. The project would install and update various transportation management systems and roadside safety improvements. All the project locations are near existing electrical features and utility lines.

### ***Environmental Consequences***

The project would require electrical and drainage work. All electrical work for changeable message signs and cabinets, vehicle detection systems, closed-circuit television camera systems, roadway information systems, extinguishable message signs, and streetlights are likely to require roadway and/or shoulder excavation and/or trenching for the placement of hardware and to provide power service. Electrical service points within the existing Caltrans right of way would be used. Closed-circuit television camera systems, highway advisory radios, and roadway weather information systems are typically installed on existing or new structures; vehicle detection system loop detectors would be placed under the existing roadway. The project would install maintenance vehicle pullouts at some locations, increasing the paved surface area in those locations and requiring an expansion or installation of new stormwater drainage. Also, stormwater drainage damaged by construction activities would be replaced.

Per Caltrans Standard Plans, all electrical conduit runs are installed within 10 feet away from the edge of pavement, including along the edge of pavement or under paved shoulder areas if it is required to avoid sensitive areas.

The standard measures outlined in Section 1.5 of this document would be included in the project.

### ***Avoidance, Minimization, and/or Mitigation Measures***

With the incorporation of the standard measures outlined in Section 1.5 of this document, the addition of new electric power to the project areas would have a less than significant impact on the environment. Project-specific avoidance, minimization, and/or mitigation measures would not be required.

#### **2.1.20 Wildfire**

Current mapping by the California Department of Forestry and Fire Protection shows the project limits are in a moderate fire hazard severity zone, with some portions in or near high and very high fire hazard severity zones. Due to more recent wildfire risk near the project area, Caltrans maintenance has requested the use of steel posts in guardrail installations that are situated in areas prone to fire, and metal guardrails would be placed near the base of the changeable message signs. Also, maintenance is following fire protocols to include defensible space around transportation management system elements and keeping vegetation mowed within the Caltrans right of way. The project would not impair an emergency response plan; not have the potential to exacerbate wildfire risk; not install infrastructure that could exacerbate wildfire risk; nor expose people or structures to wildfire risk. Caltrans 2022 revised Standard Specification 7-1.02M (2) mandates fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts during construction. The project would not be exposed to greater wildfire risk than the area is under current conditions. Considering the information in the Amended Climate Change and Greenhouse Gas Analysis Memorandum dated August 29, 2023, the following significance determinations have been made:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Wildfire</b>
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<b>No Impact</b>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<b>No Impact</b>

<b>Question—Would the project:</b>	<b>CEQA Significance Determinations for Wildfire</b>
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?	<b>No Impact</b>
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?	<b>No Impact</b>

### 2.1.21 Mandatory Findings of Significance

<b>Question:</b>	<b>CEQA Significance Determinations for Mandatory Findings of Significance</b>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<b>Less Than Significant</b> – considering the information available in the Natural Environment Study and in Section 2.1.4 of this document, the project does not have this potential.
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.)	<b>No Impact</b> – considering the information available in the Cumulative Impact Assessment Memorandum, dated September 29, 2023, the project would not have cumulatively considerable impacts.



Question:	CEQA Significance Determinations for Mandatory Findings of Significance
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<b>Less Than Significant With Mitigation Incorporated –</b> considering the information contained in this document and the mitigation measures proposed in Section 2.1.1, the project would not have substantial adverse direct or indirect effects on humans.



# Appendix A Title VI Policy Statement

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CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

## California Department of Transportation

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September 2022

### NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov).

A handwritten signature in black ink, appearing to read 'Tony Tavares', is positioned above the printed name and title.

TONY TAVARES  
Director

*"Provide a safe and reliable transportation network that serves all people and respects the environment"*

## Appendix B Project History

An Initial Study with Proposed Negative Declaration was previously circulated for this project from February 25, 2022, to March 28, 2022. At that time, the project proposed to install various transportation management system elements at 13 locations in Amador, El Dorado, and Alpine counties along State Routes 88, 89, and 4. During the circulation period, Caltrans received requests for a public information meeting from members of the public. The circulation period was then extended to May 2, 2022, and a virtual (online) public meeting was held on April 21, 2022. In addition, the Caltrans project development team presented the project at the Alpine County Board of Supervisors meeting on April 19, 2022. Comments received during the circulation period and at the public meeting indicated public opposition to proposed work at several project locations due to potential environmental impacts. Table B-1 indicates the project locations and work at each location that were proposed in 2022.

**Table B-1 Proposed Project Locations in 2022**

Location	County	State Route	Post Mile	Proposed Work
1	Amador	88	R38.24	One vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout.
2	Amador	88	53.99	One streetlight
3	Amador	88	54.11	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.
4	Amador	88	R65.95	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, one maintenance vehicle pullout, and one streetlight.
5	Amador	88	71.27	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.
6	Alpine	88	2.00	One roadway weather information system
7	Alpine	88	2.30	One vehicle detection system

Location	County	State Route	Post Mile	Proposed Work
8	El Dorado	89	8.39	One vehicle detection system, one closed-circuit television camera system, one highway advisory radio, one extinguishable message sign, and one maintenance vehicle pullout.
9	Alpine	88	13.34	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.
10	Alpine	88	18.86	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.
11	Alpine	88	24.94	One closed-circuit television camera system, one highway advisory radio, and two extinguishable message signs.
12	Alpine	89	14.59	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, and two extinguishable message signs.
13	Alpine	4	R0.84	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.

Following the public comment period, Caltrans reviewed the project scope and removed Locations 4, 5, 6, 9, and 12 from the project. Caltrans sent postcards to residents of Amador, El Dorado, and Alpine counties near the project locations on July 7, 2023, to inform them of the removed project locations. An electronic survey was listed on the postcard to gather feedback from county residents on the location updates. A detailed summary of this effort is included in the Community Impact Analysis Memo, available upon request as part of Volume 2 of this document.

On August 29, 2023, the project development team agreed to remove Locations 10 and 13 from the project scope due to public opposition to the project locations and potentially significant impacts to the location's visual resources. As a result, the project will move forward only with the proposed elements at Locations 1, 2, 3, 7, 8, and 11. As a result of these changes, the project no longer proposes work on State Route 4. Table B-2 describes the proposed project work that remains in 2023.

**Table B-2 Proposed Project Locations and Work in 2023**

Location	County	State Route	Post Mile	Proposed Work
1	Amador	88	R38.24	One vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout.
2	Amador	88	53.99	One streetlight.
3	Amador	88	54.11	One changeable message sign, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.
7	Alpine	88	2.30	One vehicle detection system.
8	El Dorado	89	8.39	One vehicle detection system, one closed-circuit television camera system, one highway advisory radio, one extinguishable message sign, and one maintenance vehicle pullout.
11	Alpine	88	24.94	One closed-circuit television camera system, one highway advisory radio, and two extinguishable message signs.

Because the project removed seven proposed locations from the scope of work, and due to a change in anticipated project impacts, a revised and updated Initial Study with Proposed Mitigated Negative Declaration (this document) was prepared and will be circulated to the public for review and comment.

## **Appendix C** Project Measures

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This appendix collects the standard measures, avoidance and minimization measures, and mitigation measures referenced throughout the document. Examples of the proposed aesthetic treatments are included.

### ***Standard Measures***

AQ-1 Caltrans Standard Specifications Section 14-9.02, "Air Pollution Control," would be included in the construction contract.

AQ-2 Caltrans Standard Specification 10-5, "Dust Control," would be included in the construction contract.

BIO-1 Caltrans Standard Specifications or Special Provisions Section 14-1.02, "Environmentally Sensitive Area," would be included in the construction contract.

BIO-2 Designated Biologist: A designated biologist would be retained to monitor construction activities and regulated species and habitats; if a contractor-supplied biologist is used, Standard Special Provision 14-6.03D would be included in the construction contract.

BIO-3 Caltrans Special Specifications Section 13-4.03E(3), "Vehicle and Equipment Cleaning," and Caltrans Construction Site Best Management Practices Manual Section NS-08, "Vehicle and Equipment Cleaning," would be included in the construction contract to maintain weed-free construction equipment and vehicles.

BIO-4 Caltrans Standard Specifications Section 20-1.03C(3), "Weed Control," would be included in the construction contract.

BIO-5 Caltrans Standard Specification 21-2.02, "Erosion Control – Materials," would be included in the construction contract. This section specifies what materials can be used for erosion control and revegetation treatments.

BIO-6 Caltrans Standard Special Provision 14-6.03A, "Species Protection," would be included in the construction contract. This section specifies the conduct of pre-construction surveys and protective buffers for special-status species.

BIO-7 Caltrans Standard Specifications Section 86-1.02M, "Photoelectric Controls" would be included in the construction contract.

BIO-8 Caltrans Standard Provisions Section 14-6.03B, "Bird Protection," would be included in the construction contract. This provision requires a focused survey for active nests of protected raptors and migratory birds if construction activities are scheduled during the nesting period, between February 1 and September 30. If active nests are found, a protective buffer

and consultation would be established per the specification. A qualified biologist would be required to ensure buffers are maintained.

- Performing ground disturbance, vegetation removal, or other construction activities within nesting bird habitat during the non-nesting season, between October 1 and January 31, would not require pre-construction surveys or nesting bird avoidance measures.

CUL-1 Caltrans Standard Specifications Section 14-2.03A, "Archaeological Resources," would be included in the construction contract.

GHG-1 Caltrans Standard Specifications Section 7-1.02A, "Legal Relations and Responsibility to the Public – General," would be added to the construction contract.

GHG-2 Caltrans Standard Specifications 7-1.02C, "Emissions Reduction," would be added to the construction contract.

GHG-3 The contract would include measures to reduce construction waste and maximize the use of recycled materials.

GHG-4 The contract would include measures to reduce consumption of potable water.

GHG-5 The contract would require the contractor to maintain equipment in proper tune and working condition.

GHG-6 The contract would require that the contractor have the right size equipment for the job.

GHG-7 The contract would require that existing project materials would be recycled or reused onsite to the extent feasible.

HW-1 Caltrans Standard Special Provision 7-1.-02K(6)(j)(iii), "Earth Material Containing Lead," would be added to the construction contract. A lead compliance plan would be required.

HW-2 Caltrans Standard Special Provision 14-11.14 "Treated Wood Waste," would be required if disposal of treated wood waste is needed.

LG-1 Caltrans Standard Specifications Section 86-1.02K, "Luminaries," would be included in the construction contract. This section specifies lighting requirements.

NQ-1 Caltrans Standard Specification 14-8.02, "Noise Control," would be included in the construction contract.



NQ-2 All equipment would have sound-control devices that are no less effective than those provided on the original equipment.

PAL-1 Caltrans Standard Specification 14-7.03, "Discovery of Unanticipated Paleontological Resources," would be included in the construction contract.

WF-1 Caltrans Standard Specification 7-1.02M (2) mandates fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts during construction.

WQ-1 Caltrans Standard Specification 13-1, "Water Pollution," would be included in the construction contract.

### ***Avoidance and Minimization Measures***

AES-1 Install conventional highway planting in strategic locations to limit visual intrusion from transportation management system elements within highway viewshed and provide watering schedule to ensure plant establishment success.

AES-2 Install non-irrigated native plant material seeding with duff top-dress covering all disturbed soil areas including the proposed construction site and equipment staging area.

AES-3 Choose lighting types that direct light downward, and install shield fixtures to all additional light sources to minimize light trespass into nighttime skies.

AES-4 Paint and/or stain, using Natina stain, changeable message structure and accessories to match existing visual surroundings.

AES-5 Stain new Midwest guardrail system, using Natina stain, to match existing visual surroundings.

AES-6 Provide a minimum three-year vegetation establishment period.

LG-2 Lighting must comply with all pertinent county ordinances and standards along with consideration to the International Dark-Sky Association (IDA)–approved lighting standards and fixtures.

LG-3 All lighting must be designed to have minimum impact on the surrounding environment and must be downcast, cutoff-type fixtures that are shielded and direct the light downward only toward objects or surfaces requiring illumination (when needed).

LG-4 Lights must be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental spill-light onto adjacent

properties or open spaces and minimize backscatter or sky glow into the nighttime sky in an attempt to eliminate nighttime light pollution.

LG-5 The lowest allowable wattage must be used for all new light sources in or near scenic resource areas identified in this document and documented in pertinent county guidelines and policies. The number of nighttime light sources proposed for dark landscape areas must be minimized.

LG-6 Light fixtures must have non-glare finishes that will not cause reflective daytime glare.

LG-7 Lights must provide good color rendering with natural light qualities, with the minimum intensity needed for security, safety, and personnel access.

### ***Mitigation Measures***

MIT-1 Install conventional highway planting in strategic locations to limit visual intrusion from transportation management system elements within highway viewshed and provide watering schedule to ensure plant establishment success.

MIT-2 Install non-irrigated native plant material seeding with duff top-dress covering all disturbed soil areas including the proposed construction site and equipment staging area.

MIT-3 Choose lighting types that direct light downward and install shield fixtures to all additional light sources to minimize light trespass into nighttime skies.

MIT-4 Paint and/or stain, using Natina stain, changeable message structure and accessories to match existing visual surroundings.

MIT-5 Stain new Midwest guardrail system, using Natina stain, to match existing visual surroundings.

MIT-6 Provide a minimum three-year vegetation establishment period.

## ***Examples of Aesthetic Treatments***

**Figure C-1 Guardrail without Natina, Guardrail with Natina**



**Figure C-2 Changeable Message Sign without Natina, Changeable Message Sign with Natina**





**Figure C-3 Cabinet without Natina, Cabinet with Natina**



**Figure C-4 Simulation of Vegetation Screening**



**Figure C-5 Example of a Light Shield**



Note that the project would not be installing any light sources such as the light source in this image. The black shielding at the top of the image is an example of the type of shielding that may be used on changeable message signs.

## Appendix D Transportation Management System Elements

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**Changeable Message Sign:** an electronic sign structure with changeable messages, lit with amber lighting, used to alert the traveling public. Changeable message signs provide motorists with advance warning of conditions ahead and inform them of alternative routes when necessary. Changeable message signs can provide advance notice of upcoming roadwork or special events that will affect travel and notify the traveling public of work zones ahead. The image below shows a changeable message sign.





**Streetlight:** a light mounted on a pole used to illuminate the highway. The image below shows a streetlight.



**Vehicle Detection Systems:** a system of loop detectors buried underneath the roadway that connects to a controller cabinet. The purpose of the loop detectors is to detect car movement on the state highway system. Vehicle detection systems collect and report valuable, real-time traffic volumes, occupancy, and speed data. The image below shows a cabinet used for a vehicle detection system.





**Closed-Circuit Television Camera System:** a camera system in which signals are not publicly distributed. The purpose of the closed-circuit television camera system is to monitor and verify roadway conditions and, in the case of incidents or congestion, assist in dispatching appropriate resources for incident response. The image below shows a closed-circuit television camera.



**Roadway Weather Information System:** these systems are meteorological measurement stations positioned strategically to collect local atmospheric data. This data will be used to automate changeable message signs to provide travelers with advance notice of adverse weather conditions. In addition, accurate and reliable weather information helps maintenance and operations personnel prepare for and mitigate costly delays, closures, and collisions due to weather conditions. The image below shows a roadway weather information system.



**Extinguishable Message Sign:** a moveable sign with fixed messages to alert the traveling public of the highway advisory radio's activation. The image below shows an extinguishable message sign.



**Maintenance Vehicle Pullout:** a parking area next to the highway that provides a safe area for maintenance personnel to park their vehicles during routine maintenance of roadway elements. The image below shows a maintenance vehicle pullout under a changeable message sign.





**Midwest Guardrail System:** railing used as a barrier along the edge of the road. The image below shows a Midwest guardrail system.



**Highway Advisory Radio:** a low-powered, noncommercial radio station used to broadcast real-time information to motorists traveling in the area. The image below shows a highway advisory radio system.





## Appendix E Project Locations

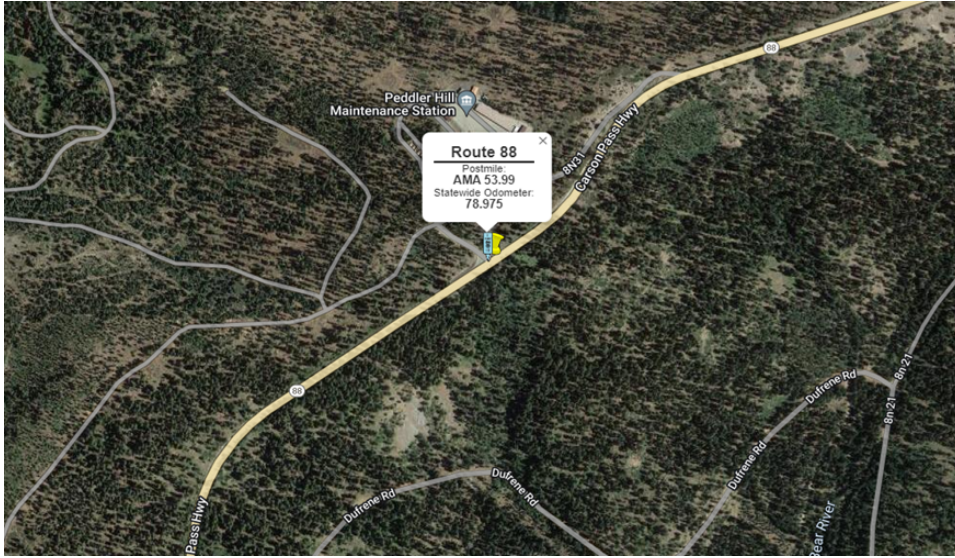
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Below is a description of the proposed work for each location and a visual of each proposed location.

**Location 1:** would install one vehicle detection system, one closed-circuit television camera system, and one maintenance vehicle pullout, replace existing metal beam guardrail with Midwest guardrail, and replace the existing changeable message sign with an updated changeable message sign.



**Location 2:** would install one streetlight.





**Location 3:** would install one changeable message sign with controller cabinets, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout.

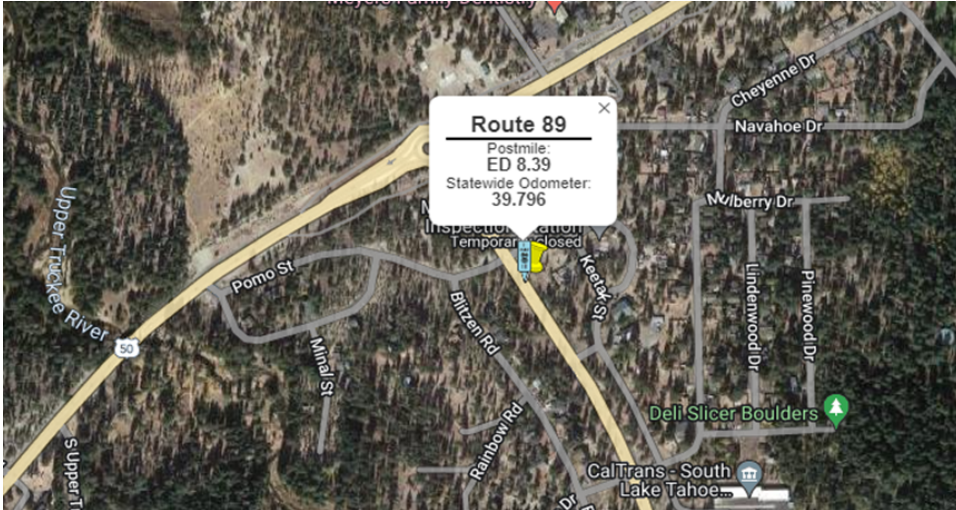


**Location 7:** would install one vehicle detection system.





**Location 8:** would install one vehicle detection system, one closed-circuit television camera system, one highway advisory radio, one extinguishable message sign, one maintenance vehicle pullout, replace existing metal beam guardrail with Midwest guardrail, and replace the existing changeable message sign with an updated changeable message sign.



**Location 11:** would install one closed-circuit television camera system, one highway advisory radio, two extinguishable message signs, and replace the existing changeable message sign with an updated changeable message sign.



## **List of Technical Studies Bound Separately (Volume 2)**

The following studies were conducted for this project and are available upon request.

Air Quality Memorandum

Community Impact Assessment Memorandum

Cumulative Impact Assessment Memorandum

Noise Compliance Memorandum

Water Quality Memorandum

Natural Environment Study – Minimal Impacts

Preliminary Location Floodplain Study

Historical Property Survey Report (and amendments)

- Historic Resource Evaluation Report
- Archaeological Survey Report

Hazardous Waste Reports

- Initial Site Assessment
- Preliminary Site Investigation (Geophysical Survey)

Section 4(f) Memorandum

Visual Impact Assessment

Paleontological Identification Report

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Jonathan Coley  
District 10 Environmental Division  
California Department of Transportation  
1976 East Doctor Martin Luther King Junior Boulevard, Stockton, California 95207

Or send your request via email to: [Jonathan.Coley@dot.ca.gov](mailto:Jonathan.Coley@dot.ca.gov) Or call: 209-479-4083

Please provide the following information in your request:

Project title: Carson Transportation Management Systems

General location information: Along State Routes 88 and 89 in Amador, El Dorado, and Alpine counties

District number-county code-route-post mile: 10-AMA, ED, ALP-88, 89-VARIOUS

Project ID number: 1018000275