Canyonero 2R Roadway Rehabilitation and Temporary Hot Mix Asphalt Plant Project

SHASTA COUNTY, CALIFORNIA
02-SHA-5-R44.0/R58.0
2C450

Draft Initial Study with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation
Caltrans District 2
1657 Riverside Drive
Redding, CA 96001

February 2012

General Information About This Document

What's in this document?

This Draft Initial Study with proposed Mitigated Negative Declaration (IS/MND) examines potential environmental effects of a Roadway Rehabilitation with Temporary Hot Mix Asphalt Concrete Batch Plant Project. The project is located on Interstate 5 in Shasta County near the community of Lakehead from approximately 1.5 mile south of Dog Creek Bridge to 0.6 mile north of Sims Road Undercrossing (post mile R44.0 to post mile R58.0). The IS/MND was prepared to comply with the California Environmental Quality Act. It describes the project, the existing environment, and the potential effects this project may have on the environment.

What should you do?

- Please read this IS/MND.
- We welcome your comments. If you have any information or concerns regarding the project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to:

  California Department of Transportation
  Attention: Christopher Quiney
  Office of Environmental Management, MS-30
  P.O. Box 496073
  Redding, CA 96049-6073

- You may also submit comments via e-mail to chris.quiney@dot.ca.gov.
- Submit comments by the deadline: March 14, 2012.

What happens after this?

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

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Equal Employment Opportunity Officer, 1657 Riverside Drive, CA 96001; (530) 225-3163 Voice, or use the California Relay Service TTY number, (530) 225-2019.

02-SHA-5-PM R44.0/R58.0
EA 02-2C450
SCH No.

Canyonero 2R Roadway Rehabilitation and Temporary Hot Mix Asphalt Plant Project on Interstate 5 in Shasta County near the community of Lakehead from approximately 1.5 mile south of Dog Creek Bridge to 0.6 mile north of Sims Road Undercrossing

DRAFT INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division13, Public Resources Code

STATE OF CALIFORNIA
Department of Transportation

Feb. 8, 2012
Date of Approval

CINDY ANDERSON
Office Chief
North Region Environmental Services, North
California Department of Transportation

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SCH No.
02-SHA-5-PM R44.0/R58.0
02-2C450

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) has initiated a roadway rehabilitation project (Canyonero 2R Project) on Interstate 5 in Shasta County near the community of Lakehead from approximately 1.5 mile south of Dog Creek Bridge to 0.6 mile north of Sims Road Undercrossing (post mile R44.0 to post mile R58.0). The project includes an asphalt concrete overlay, installation and operation of a temporary hot mix asphalt (HMA) plant within the highway right-of-way, grinding and digging-out existing pavement, cracking and seating existing Portland cement concrete pavement, replacement of bridge joint seals, rehabilitation of bridge decks and adjustment or replacement of bridge approach slabs, construction of asphalt concrete dike to facilitate storm water drainage, placement of new shoulder backing, new pavement delineators and traffic paint, adjusting and upgrading metal beam guardrail, adjusting drainage inlets, adding new signs and upgrading existing traffic signs, installation of overhead sign structures, miscellaneous construction staging and stockpiling operations, upgrading and installing new closed-circuit TV cameras, installing highway advisory radios and roadway weather information systems, and repairing an embankment slip-out at post mile 50.5 adjacent to the southbound traffic lanes.

Determination

Caltrans has prepared an Initial Study for this project, and following public review, has determined from this study that the project would not have a significant effect on the environment for the following reasons:

The project would have no effect on aesthetics, agricultural and forest resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, and transportation/traffic, and utilities and service systems.

Potential adverse impacts to air quality would be reduced to a level of less than significant with the implementation of all conditions included in the Authority to Construct and Permit to Operate issued by the Shasta County Air Quality Management District.

_____ _____

John Bulinski
District Director, District 2
California Department of Transportation

Date

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Project Background

In August 2005, Caltrans approved an asphalt resurfacing project on Interstate 5 from PM R44.4 to R58.0 in Shasta County, known as the Canyonero 2R Project (Project). Caltrans determined the Project to be categorically exempt from CEQA under section 15301(c) of the CEQA Guidelines. The Categorical Exemption was approved on August 5, 2005.

Following the appropriate notice and bidding processes, the contract to construct the Project was awarded to Mercer-Fraser Company on November 29, 2010.

On May 25, 2011, Caltrans prepared a NEPA/CEQA Revalidation Form which set forth several changes to the project, including the installation of a hot-mix asphalt (HMA) plant at a Caltrans disposal site within the project limits. The Revalidation explained: "[T]*he location was environmentally reviewed in September 2003 for the permanent disposal of material generated during maintenance and construction related activities. The contractor will restore the site to pre-construction conditions and is responsible for obtaining any state, county or local permits required for installing and operating the plant."* Caltrans concluded that the CEQA Categorical Exemption remained valid and that no additional public review was therefore required. No Notice of Exemption was filed with the Governor's Office of Planning and Research; therefore, the statute of limitations within which to bring an action on the Revalidation under CEQA was 180 days, or until November 21, 2011.

On approximately June 17, 2011, the Shasta County Air Quality Management District (SCAQMD), acting as lead agency, prepared and filed an Initial Study and Mitigated Negative Declaration (IS/MND) in response to Mercer-Fraser's application for an Authority to Construct and Permit to Operate for installation and operation of an asphalt-drum mix plant to provide asphalt for the Project. On July 27, 2011, the SCAQMD issued an Authority to Construct and Permit to Operate a portable asphalt-drum mix plant and accompanying structures.

Meanwhile, on July 1, 2011, Caltrans received an email from an attorney representing J.F. Shea Company, a contracting firm that bid on the Project, but was not awarded the contract. The attorney stated: *"Because the changes to the project include installation of an asphalt batch plant, the project does not qualify for a Categorical Exemption or a Categorical Exclusion.*" The attorney further stated that "*no assessment of the cumulative impacts of plant emissions has been conducted*," and that "*these cumulative impacts preclude a Categorical Exemption under CEQA*." The attorney requested that the Categorical Exemption and Categorical Exclusion be rescinded and a full evaluation of these issues be completed. On July 25, 2011, Caltrans sent the attorney an email response, stating that because the HMA plant was not part of the Project, the revalidated CE/CE was sufficient and that environmental review of the plant was the responsibility of the contractor. Following additional correspondence, however, the Caltrans Legal Division reviewed the contract, the CE/CE and other documents related to the project, and determined that it was, in fact, appropriate to perform an Initial Study to evaluate the environmental impacts of the Project as a whole, including the HMA plant. Accordingly, on September 16, 2011, the Legal Division sent a letter to the attorney, advising him that Caltrans would instruct Mercer-Fraser Company to prepare an Initial Study. Mercer-Fraser enlisted a consultant to prepare the Initial Study, and a draft was presented to Caltrans on October 25, 2011. Since that time, Caltrans environmental staff has been working with the consultant to prepare a final document. J.F. Shea did not otherwise challenge Caltrans' award of the Project contract to Mercer-Fraser, or challenge SCAQMD's environmental review and approval of the ATC/PTO for the HMA plant. J.F. Shea also did not challenge Caltrans' May 25, 2011 approval of the HMA plant placement in the highway right-of-way within the applicable statutory challenge period.

Based on review of the draft Initial Study and the circumstances of this Project, Caltrans has determined that the appropriate course of action is to prepare an Initial Study/Mitigated Negative Declaration (IS/MND) for the entirety of the Project, including the HMA plant.

Project Description

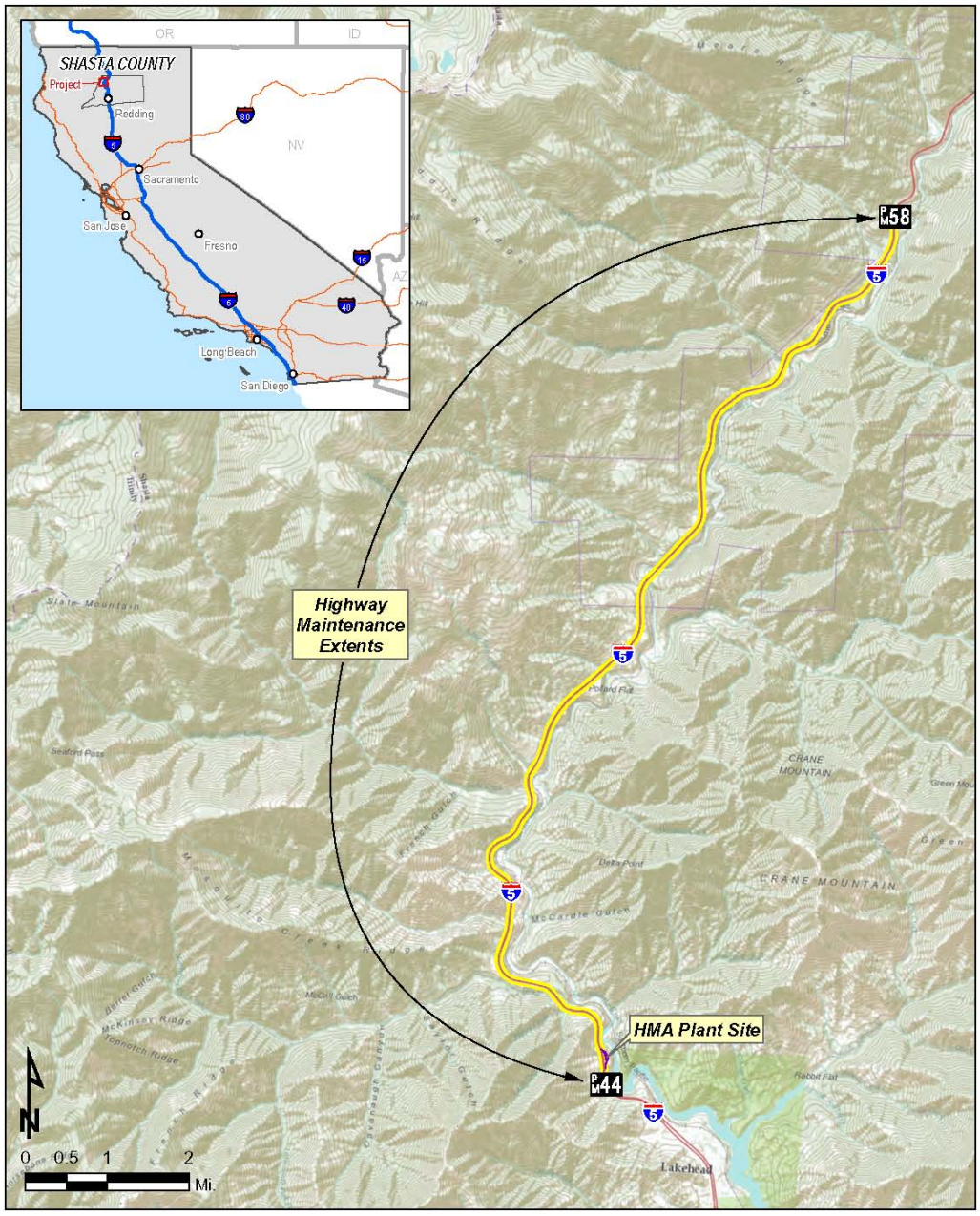
Project Title:	Canyonero 2R Roadway Rehabilitation and Temporary Hot Mix Asphalt Plant Project 02-SHA-5-PM R44.0/R58.0
Lead Agency Name and Address:	Caltrans, District 2 1657 Riverside Drive Redding, CA 96001
Contact Person and Phone Number:	Chris Quiney, Environmental Coordinator, Caltrans, North Region Office of Environmental Mgmt. – Redding Phone (530) 225-3174
Project Location:	The Canyonero 2R Project (02-SHA-5-PM R44.0/R58.0) is within Caltrans right-of-way and extends along Interstate 5 near Lakehead from 1.5 mile south of Dog Creek Bridge to 0.6 mile north of Sims Road Undercrossing, between Post Miles (PM) R44.0 and R58.0 in Shasta County. The Project includes installation of a temporary hot mix asphalt (HMA) plant on approximately 3.7 acres located between PM 44.14 and 44.44 (APN 082-250-005).
Project Sponsor's Name and Address:	Caltrans District 2 1657 Riverside Drive Redding, CA 96001
General Plan Designation:	N/A (Caltrans right-of-way)
Zoning:	N/A (Caltrans right-of-way)
Description of Project:	The Project involves highway maintenance activities, including placement of an asphalt overlay over the full width of the existing roadway at various locations on I-5 near Lakehead from 1.5 mile south of Dog Creek Bridge to 0.6 mile north of the Sims Road Undercrossing in Shasta County (see Figure 1). The maintenance work is planned to be completed by the fall of 2012. Prior to the addition of the HMA plant to the Project, the maintenance activities were environmentally reviewed and the Project was determined to be subject to a CE/CE.[1] The Project also includes installation of a temporary HMA plant adjacent to the freeway at the south end of the Project (see Figure 2). A contractor will operate the HMA plant at a ±3.7-acre Caltrans site located between PM 44.14 and 44.44. The HMA plant site, also known as

[1] District 2 Programmatic Categorical Exemption for Maintenance Projects. May 13, 2002; Categorical Exemption/Categorical Exclusion EA #02-2C450K for 02-SHA-5, KP 71.5/93.4 (PM R44.4/R58.0). August 5, 2005.

	the Riverview Disposal Site, was environmentally reviewed[2] and approved for permanent disposal of material generated from routine maintenance and construction activities. The Riverview Disposal Site preparation activities that were covered under previous CEQA documentation include, but are not limited to, disposal, mud tub or stockpile site creation; open grading; vegetation removal; and access pull-out creation for parking, staging, and stockpiling. Those activities have been implemented at the site. Therefore, the HMA component of the Project is limited to the operation of the plant under the conditions and time limits imposed by the Shasta County Air Pollution Control Board. The contractor will restore the HMA site to pre-construction conditions. The HMA plant is composed of storage bins, conveyors, asphalt oil storage tanks, a drying drum, a mixing drum, an asphalt storage silo, a scalping screen, and an electricity generator (diesel-fired engine). The plant site includes aggregate storage piles and vehicles such as haul trucks, a water truck, and a loader. Please see Checklist Item *III. Air Quality* for plant equipment specifications and operating conditions. The Shasta County Air Quality Management District (SCAQMD) prepared an IS/MND to evaluate the air quality impacts of the plant and subsequently issued an Authority to Construct (ATC) / Permit to Operate (PTO). The entire HMA plant and operation encompass approximately two (2) acres. The maximum permitted plant operation schedule is eight (8) hours per day, five (5) days per week, and twenty (20) weeks per year. This Initial Study (IS) is being prepared to evaluate the effects that the revised Project, including both the maintenance activities and the HMA plant, may have on the environment.
Surrounding Land Uses and Setting:	Surrounding land uses are predominantly forest woodlands and Interstate 5. With respect to the HMA plant site, residential properties begin at approximately 0.3 mile from the facility site and a major river (Sacramento River) lies approximately 645 horizontal feet from the facility site. The nearest industrial facility is approximately 2 miles from the HMA plant site.
Other Public Agencies Whose Approval is Required (e.g. permits, financial approval, or participation agreements):	On July 26, 2011, the Shasta County Air Pollution Control Board adopted a Mitigated Negative Declaration and issued ATC/PTO 11-PO-05 to construct and operate the temporary HMA plant in accordance with

[2] District 2 Programmatic Categorical Exemption for Maintenance Projects. Riverview Disposal Site, SHA-5-44.1 (NB), EA #02-916030 MDISPOSAL. September 18, 2003.

	the SCAQMD Rules and Regulations. A Storm Water Pollution Prevention Plan (SWPPP) was submitted to the Central Valley Regional Water Quality Control Board (WDID #5R45I023108) to comply with the State Water Resources Control Board's Industrial Storm Water General Permit Order #97-03-DWP relative to the construction and operation of the HMA plant. A Water Pollution Control Program (WPCP) was implemented for the roadway rehabilitation component of the project.



Sources: ESRI, DeLorme, NAVTEQ

FIGURE 1
Regional Location Map

Canyonero 2R Project 02-SHA-5-PM R44.0/R58.0
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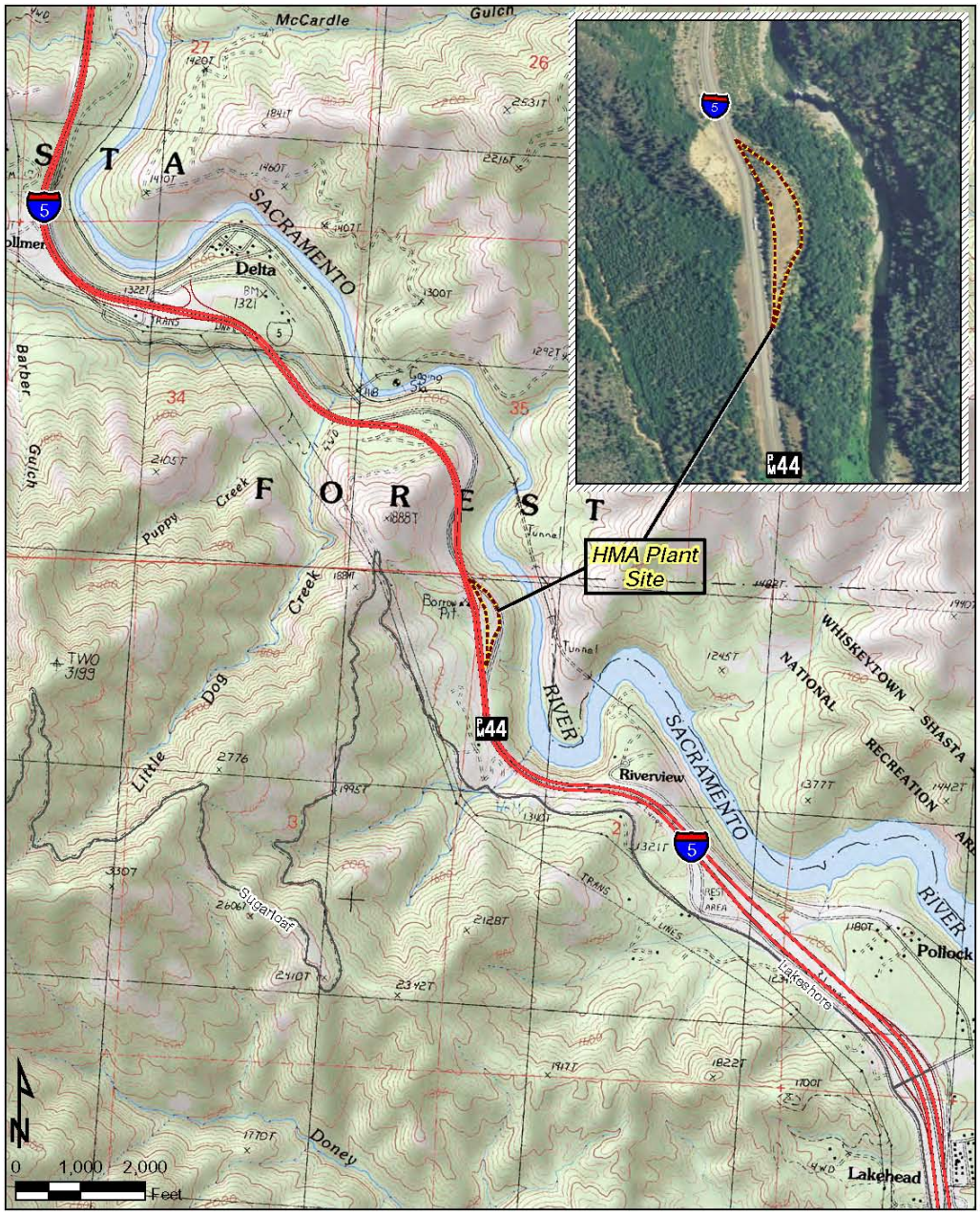

Site Location: Section 2, Township 35 North, Range 5 West (Mt. Diablo)

Sources: USGS 7.5-Minute Map Series, Lamoine Quadrangle (1990 Provisional Ed.)
ESRI highway data (2011)

FIGURE 2
Hot-Mix Asphalt Plant Site Location

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Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 8 for additional information.

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

Environmental Determination

On the basis of this initial evaluation:

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

Signature: [signature]	**Date:** 2-8-12
Printed Name: Cindy Anderson	**For:**

CEQA Environmental Checklist

02-SHA-5	R44.0/R58.0	2C450
Dist.-Co.-Rte.	P.M/P.M.	E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

I. AESTHETICS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) The 2010 Regional Transportation Plan for Shasta County identifies five areas of scenic resources in Shasta County: Shasta Lake, the Sacramento River, Castle Crags, Whiskeytown Lake, and Lassen Volcanic National Park. Of these, only the Sacramento River is in the vicinity of the Project, in particular, the HMA plant site (the river being approximately 600 feet to the east). Motorists do not have views of the Sacramento River from the I-5 in the area of the HMA plant due to the difference in elevation and topography in that area. The HMA plant is visible from the freeway, but does not block views of the river. For this reason, the Project would have no impact relating to a substantial adverse effect on a scenic vista. No change to the Project has occurred that alters this conclusion.

b) According to the California Scenic Highway Mapping System, the Project site is not located near a state scenic highway. The nearest state scenic highway is State Route 151, 15 miles south of the HMA plant site. There is no impact related to substantial damage to scenic resources within a state scenic highway. No change to the Project has occurred that alters this conclusion.

c) The Project site is an existing highway. The HMA plant site is located adjacent to the northbound travel lanes. The site itself was previously graded and cleared of all significant vegetation in preparation for use as a disposal site. The Project, including the HMA plant, are temporary highway maintenance related activities common to I-5 and will result in no impact

relating to the substantial degradation of the existing visual character or quality of the site and its surroundings. No change to the Project has occurred that alters this conclusion.

d) The Project includes limited lighting for security purposes and to allow for early morning operations. Lighting on the site is restricted by California Green Building Standards (CALGreen) Code Section 5.106.8. The CALGreen Code requires interior and exterior lighting be designed such that no direct-beam illumination leaves the building site, all exterior luminaires be shielded, and all exterior lights be controlled to turn off or reduce lighting levels during inactive periods. The CALGreen Code would permit virtually no light (specifically, no more than 0.01 horizontal foot candles) from new development to escape beyond 15 feet of the Project site. The implementation of the mandatory provisions of the CALGreen Code for controlling light spillover and light pollution, as well an absence of nearby sensitive receptors will ensure no impacts related to lighting and glare. No change to the Project has occurred that alters this conclusion.

II. AGRICULTURE AND FOREST 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 Dept. 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. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) The Project site, including the HMA site, is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Significance According to the Shasta County Important Farmland 2008 map, prepared by the Farmland Mapping and Monitoring Program of the California Department of Conservation, the HMA plant site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Significance. There is no impact related to the conversion of Farmland to non-agricultural use. No change to the Project has occurred that alters this conclusion.

b) The Project site, including the HMA plant site, is owned by Caltrans, making any local zoning designations for the site non-regulatory. There is no impact relating to conflicts with existing agricultural zoning.

According to the Williamson Act Contract Ranches/Agricultural Preserves 2009 map, prepared by the County of Shasta, the Project site, including the HMA plant site, is not protected by a Williamson Act contract. There is no impact relating to conflicts with existing Williamson Act contracts.

c) The Project site, including the HMA plant site, does not contain forest land as defined by Public Resources Code section 12220(g). The Project site does not contain timberland as defined by Public Resources Code section 4526. The site is not available for, nor capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products. The Project site is owned by Caltrans, making local zoning non-regulatory. There is no impact resulting from conflicts with the existing zoning for forest land, timberland, or timberland zoned Timberland Production.

d) Project site consists of existing roadway, and the HMA plant site in particular is currently clear of any significant vegetation. The HMA plant site was previously graded and prepared for use as a materials disposal site, and therefore cannot support 10 percent native tree species. There is no impact related to the loss of forest land or conversion of forest land to non-forest use.

e) The Project involves an asphalt concrete overlay and operation of a temporary HMA plant within the highway right of way; therefore, no changes to the nature of the local environment would be expected to induce a conversion of Farmland to non-agricultural uses. Properties adjacent to the Project site in particular include forest land; there are no other identified changes in the environment that would induce the conversion of these forest lands to non-forest use. There is no impact resulting from changes to the existing environment which could result in conversion of Farmland to non-agricultural use or forest land to non-forest use.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

The roadway rehabilitation component of the Project will result in short-term air quality impacts related to construction activities. These impacts will consist primarily of exhaust emissions from construction equipment and generation of fugitive dust. Some phases of construction, particularly asphalt paving, will result in short-term odors in the immediate area of the paving operation. Such odors would be quickly dispersed below detectable levels as distance from the operation increases. Caltrans Standard Specifications, as amended, **Section 14-9.01 Air Pollution Control** and **Section 14-9.02 Dust Control**, should effectively reduce and control emission impacts during construction. The provisions of **Section 7-1.01 Laws to be Observed** require the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

The analysis and findings in this section, which pertain to the HMA plant component of the Project, draw from technical studies, public agency findings, and approved CEQA documents, as listed and described below. The resource materials are on file in the office of the Shasta County Air Quality Management District, 1855 Placer Street, Suite 101, Redding, CA 96001, Phone: (530) 225-5674:

- **Shasta County Department of Resource Management, Air Quality Management District. 2011, June 7. *Evaluation -- Authority To Construct Application.***

  Mercer-Fraser submitted an Authority To Construct (ATC) / Permit To Operate (PTO) application to the Shasta County Air Quality Management District (SCAQMD) for the installation and operation of an asphalt drum-mix plant. The SCAQMD conducted an air quality evaluation and assessment (Application Evaluation) of the presumptive types and potential quantity of air pollutant emissions produced during the operation of an asphalt drum-mix plant facility. The Application Evaluation referenced air quality rules and regulations, specifically pertinent to the HMA operation, that are currently implemented

and enforced by the SCAQMD. The Application Evaluation and supporting data are also available for review at Caltrans District 2, 1657 Riverside Drive, Redding, CA 96001, Phone: (530) 225-3174.

- **Shasta County Department of Resource Management, Air Quality Management District. 2011, June 17. *Environmental Initial Study, Mercer-Fraser Company Asphalt Drum-Mix Plant Operation.***

  The Initial Study (IS) served as the basis for the Mitigated Negative Declaration (MND) that SCAQMD prepared pursuant to CEQA. The IS/MND (State Clearinghouse Number 2011062055) was distributed for public review and comment for the period between June 22 and July 21, 2011. The IS/MND reflects SCAQMD's independent judgment as approving authority for the Authority to Construct and Permit to Operate. The IS/MND evaluation and mitigation focus was limited to the increase in air emissions from the asphalt drum-mix plant. The IS/MND analysis cited and summarized the findings of the SCAQMD's Application Evaluation, which quantified the HMA project's emission levels. The engineering evaluation, along with supporting emissions calculations and other quantitative data, was not an appendix to the IS/MND, though it was publicly available upon request.[3] The following air quality analysis reiterates the SCAQMD's IS/MND evaluation and provides the corresponding quantitative emissions data to support the findings.

- **Shasta County Department of Resource Management, Air Quality Management District. 2011, July 19. *Authority to Construct #11-PO-05 (Draft) – Mercer-Fraser Company Asphalt Drum-Mix Plant*.**

  The SCAQMD's Application Evaluation quantified the HMA project's emission levels, which in turn determined the operating permit conditions and requirements established by SCAQMD rules and regulations. Thirty-one (31) conditions and requirements are stated in the Authority to Construct and Permit to Operate.

- **Shasta County Department of Resource Management, Air Quality Management District. 2011 July. *Report to Shasta County Air Pollution Control Board, with Resolution; Statement of Conditions; Initial Study; and Authority to Construct 11-PO-05 (Draft).***

  The Report to the Board indicated that the HMA plant would be required to meet best available emission control technology (BACT) requirements for a stationary source. It further explained that in conjunction with the Application Evaluation, SCAQMD completed the aforementioned Initial Study according to CEQA Guidelines, the conclusions of which found a less-than-significant impact with mitigation incorporated, thereby supporting the Board's adoption of a Mitigated Negative Declaration.

The HMA component of the Project is summarized below as context for the checklist discussions that follow. The project summary and checklist analyses are based on technical information from the Application Evaluation, which was completed by SCAQMD prior to approval of the MND and prior to issuance of the ATC/PTO.

Hot-Mix Asphalt Project Overview

The asphalt drum-mix plant facility produces paving-grade asphalt for the blanket overlay portions of the Project. Asphalt (or hot-mix asphalt) is essentially a mixture of aggregate (coarse and fine) and asphalt oil (liquid asphalt cement). The aggregate source for the plant operation is

[3] See statement of availability of "*District engineering evaluation of Mercer-Fraser Company ATC application*" on p. 21 of SCAQMD's Environmental Initial Study dated June 17, 2011.

produced by and transported to the HMA plant site from a neighboring aggregate mineral processing plant. All aggregate material for use in Caltrans projects is required to originate from "3098" authorized sites, which means the material is purchased only from suppliers who are fully compliant with SMARA. The asphalt oil is stored on-site in two (2) storage tanks. Measured proportions of the two aggregate types are mixed and heated in a drum then are conveyed into a separate drum to be mixed with a measured proportion of heated asphalt oil to produce the final asphalt mixture.

Operation and Process Description

The Applicant proposed a tentative maximum operation schedule of (6) six months (June to November 2011) for the repaving portion of the Canyonero 2R Project. However, since repaving and HMA plant operation require stable and dry weather conditions over the six-month period, unexpected unstable weather conditions may cause a delay in the project, whereby paving would be extended into the next year with an approximate restart in May 2012. Therefore, the Applicant requested, and the approved ATC/PTO authorizes, two (2) six-month periods of operation in 2011 and 2012.

In the process of asphalt production, front-end loaders transfer the "cold" aggregate (coarse and fine gravels) into specified aggregate bins. From the bins, the proportioned aggregate is conveyed into the aggregate dryer drum. The purpose of the drying drum is to dry and heat the aggregate mix to temperature. The dryer drum is heated internally by a propane gas flame. From the dryer drum, the dried and heated aggregate mix is transferred into a rotary mixing drum. In the mixing drum, a metered amount of asphalt oil (liquid asphalt cement) is added to the aggregate mix. The materials are mixed for a set period of time and the mixture produces the final asphalt product. From this point, the asphalt is conveyed into a batcher bin mounted above the asphalt storage bin (surge bin). Upon a quality control check, the asphalt is deposited into the storage bin (silo) until needed. When needed, the asphalt is drop-loaded into trucks and hauled to paving project locations.

An associated process recycles reclaimed asphalt. Reclaimed asphalt is harvested from roadway repaving projects and trucked to plant-site storage piles. The recycled asphalt process (RAP) begins with front-end loaders transferring the reclaimed asphalt from the storage piles into and through a grizzly sorter and/or a scalping screen. The sorter and/or screen process is necessary to achieve the necessary material size and consistency for further processing. Then, the material is conveyed directly into the mixing drum to be mixed with asphalt oil.

All stationary plant equipment is powered exclusively by an electricity generator (via diesel-fired engine). The entire HMA plant and operation encompasses approximately two (2) acres. The maximum permitted HMA plant operation schedule is eight (8) hours per day, five (5) days per week, and twenty (20) weeks per year.

Table III-1. Process Equipment and Systems

Equipment / Device ..... Qty.	Description / Specifications	Purpose
Bins ..... 4 { Astec }	10' x 10' x 6' (each); elevated	storage and segregation containers of different sized cold aggregate
Conveyor [A] ..... 1 { Astec }	3' x 60'; 475 tons/hr (max rate/capacity)	cold aggregate material transfer mode to screen
Scalping Screen ..... 1 { Astec }	2' x 10'; single deck; 475 tons/hr (max rate/capacity)	screens out over-sized aggregate material from bins to dryer drum
Conveyor [B] ..... 1 { Astec }	3' x 60'; 475 tons/hr (max rate/capacity)	cold aggregate material transfer mode to dryer drum
Dryer Drum ..... 1 { Astec }	9' x 37'; 475 tons/hr (max rate/capacity); w/associated burner	drying and heating cold aggregate to dryness and temperature
Burner [DD] ..... 1 { Hauck; Model #ESII-200 }	200 MMBtu/hr; propane-fired; low-NOx; flue-gas-recirculation	heat source for dryer drum
Mixing Drum ..... 1 { Astec }	8' x 22'; 500 tons/hr (max rate/capacity)	device where hot aggregate (moved from dryer drum) is added with asphalt oil and then mixed
Conveyor [C] -- drag chain ..... 1 { Astec }	3' x 65'; 500 tons/hr (max rate/capacity)	transfer mode of asphalt product from mixing drum to batcher (atop surge bin)
Equipment / Device ..... Qty.	**Description / Specifications**	**Purpose**
Batcher ..... 1 { Astec }	5 ton capacity	collection device at conveyor drop point of asphalt prior to surge bin
Asphalt Surge Bin ..... 1 { Astec }	200 ton capacity	storage silo for asphalt product and drop point into trucks
Asphalt Oil Storage Tanks .... 2 { Astec }	30,000 gallon-capacity (each); w/associated heater	storage and heating containers for asphalt oil
Heater [AOST] ..... 1 { Powerflame; Model #C2-GO-20B }	3.08 MMBtu/hr; diesel-fired; 21.4 gal/hr	heat source for asphalt oil
Generator {Engine} ..... 1 { Caterpillar; Model #3508 }	1971 bhp; diesel-fired; turbocharger; aftercooler; PERP Reg #142860 -- Exp: 03/31/14	electrical power source for all stationary motorized equipment
Grizzly Sorter 1	10' l x 10' w x 8' h	for recycled asphalt process in screening out large pieces to necessary material size & consistency
Storage Piles 5	20 meter base {400 m^2}; coarse (2); fine (2); recycled asphalt (1)	open-air storage of aggregate and recycled asphalt materials
Liquid Propane Gas Tank 2	20,000 gallon-capacity (each)	storage containers of propane (used as fuel for dryer drum burner)
Diesel Storage Tank 1	2,000 gallon capacity	storage container of diesel fuel (used as fuel for asphalt oil storage tank heater and loader)
Loader - Front-End 1	450 bhp; 5 yd^3 capacity	transports aggregate and recycled asphalt from storage piles to bins and/or conveyor
Source: SCAQMD 2011a		

The HMA plant operation schedule and operation process rate parameters were submitted by the Applicant as the best estimate for maximum and minimum operation schedules and process rates. Pertinent plant operation schedule and process rate parameters are as follows:

- Production rate (max) 500 tons/hr; 4,000 tons/day; 300,000 tons/yr
- Operation time (max) 8 hrs/day; 5 days/wk; 20 wks/yr; 100 days/yr; 800 hrs/yr
- Aggregate transfer (max) 475 tons/hr; 3,800 tons/day; 285,000 tons/yr (from storage piles to dryer; includes aggregate & recycled asphalt)
- Storage piles 5 active/yr (coarse aggregate; fine aggregate; recycled asphalt)

- Unpaved roads	½ mile (trucks / loaders)
- Vehicle trips (max)	50 trucks/day; 5 VMT/hr; 40 VMT/day; 4,000 VMT/yr
- Plant area	2 acres

a) With implementation of best available control technology to limit pollutant emissions, along with reporting and recordkeeping requirements mandated by the SCAQMD, the HMA project's pollutant emissions will not conflict with or obstruct implementation of the 2009 Attainment Plan for the Northern Sacramento Valley Air Basin, as adopted by Shasta County, or any other applicable air quality plan. Please see checklist item b) below for a detailed discussion of HMA project emissions and emissions control requirements.

b) SCAQMD Rule 2:1 (New Source Review) was applied to the HMA plant operation, as a new stationary source. The purpose of the rule is to establish pre-construction review requirements for new and modified stationary sources of air pollution emissions: (a) for use of best available control technology (BACT); (b) for analysis of air quality impacts; and (c) to ensure that the operation of such sources does not interfere with the attainment of ambient air quality standards.

The HMA plant operation generates emissions of the following criteria pollutants:

- reactive organic compounds (ROC)
- particulate matter - ten microns (PM10)
- oxides of nitrogen (NOx)
- carbon monoxide (CO)
- oxides of sulfur (SOx).

These pollutants are rule-listed air pollutants and the HMA operation's assessed emission rates of these pollutants determined BACT applicability. All listed pollutants, except ROC, have an established state and federal ambient air quality standard. Accordingly, SCAQMD applied BACT if emissions calculation results found that the HMA plant operation's "potential-to-emit" equaled or exceeded the following pollutant limits:

- ROC limit of twenty-five pounds per day (25 lbs/day);
- PM10 limit of eighty pounds per day (80 lbs/day);
- NOx limit of twenty-five pounds per day (25 lbs/day);
- CO limit of five-hundred pounds per day (500 lbs/day);
- SOx limit of eighty pounds per day (80 lbs/day).

SCAQMD calculated facility operation emission rates for each pollutant and measured those rates against state and federal standards. As a new emissions unit, a cumulative emissions increase was assessed as "proposed emissions / potential-to-emit" in the SCAQMD evaluation. Emissions calculations were performed to ascertain potential-to-emit and included all emission points / sources of the HMA process operation. Emission calculations included specific emission point potential-to-emit and a cumulative (all emission points collectively) potential-to-emit. Calculations also included maximum and average hourly, daily, and yearly emission rates.

Emission factors were determined by SCAQMD to be the best available, most current, best fit, and most pertinent to the emission sources of this type of operation at the time of their evaluation in June 2011. The emission factors were referenced from various documents. Copies of the references are in the facility file at SCAQMD. Input assumptions are listed in Table III-2 below.

Table III-2. Process Equipment Emissions Sources and Controls

Equipment / System (Point Source)	Pollutant Type of Emission	Emission Control Device / Method	Control Efficiency
Bins	PM10	water spray (as necessary)	95%
Conveyor [A]	PM10	water spray (as necessary)	95%
Scalping Screen	PM10	water spray (as necessary)	95%
Conveyor [B]	PM10	water spray (as necessary)	95%
Dryer Drum (cyclone --> baghouse)	PM10; NOx; CO; SOx; ROC	cyclone ..... Astec; 16' l x 12' d baghouse ... Astec; PBH-85:SP; 85,000 cfm	99% (PM10) 0% (others)
Mixing Drum (cyclone --> baghouse)	PM10; NOx; CO; SOx; ROC	cyclone ..... Astec 16' l x 12' d baghouse ... Astec; PBH-85:SP; 85,000 cfm	99% (PM10) 0 % (others)
Conveyor [C]	PM10; NOx; CO; SOx; ROC	none .... enclosed	100%
Batcher	PM10; NOx; CO; SOx; ROC	blue-smoke filter [A] .... (during filling into surge bin)	85%
Asphalt Surge Bin	PM10; NOx; CO; SOx; ROC	blue-smoke filter [B] .... (during bin load-out into truck)	85%
Equipment / System (Point Source)	**Pollutant Type of Emission**	**Emission Control Device / Method**	**Control Efficiency**
Asphalt Oil Storage Tanks	ROC	none ... capped but pressure vented to ambient	0%
Cyclone (stack & drop)	PM10	none....stack enclosed & ducted to baghouse none ....drop enclosed & ducted to drums	100% 100%
Baghouse (stack & drop)	PM10	none ....stack to atmosphere none ....drop enclosed & ducted to drums	0% 100%
Blue Smoke Filters (filling & load-out)	ROC	none .... stack to atmosphere none .... stack to atmosphere	0% 0%
Generator / Engine	PM10; NOx; CO; SOx; ROC	aftercooler; turbocharger; low-sulfur fuel	0-50%
Storage Piles	PM10	water spray (as necessary)	90%
Haul Road	PM10	water truck (as necessary)	90%
Source: SCAQMD 2011a			

Table III-3 shows a summary of the HMA plant's daily potential to emit criteria pollutants, as compared to BACT thresholds.

Table III-3. HMA Plant Emissions and BACT Thresholds

Pollutant	Daily Potential to Emit (lbs/day)	BACT Threshold (lbs/day)
PM10	24	80
NOx	252	25
CO	533	500
SOx	15	80
ROC	84	25
Source: SCAQMD 2011a		

The calculated results found that the "potential to emit" would exceed the BACT threshold pollutant rate limits for NOx, CO and ROC; therefore, SCAQMD specified BACT for those pollutants. BACT measures required by SCAQMD will be in place and operate at all times for the life of the project. The measures, including equipment and performance standards, are provided in Table III-4.

Table III-4. BACT Equipment Requirements

Pollutant	Emission Unit / Point	BACT Technology / Equipment	BACT Performance Standard
NOx (as NO_2)	Drying Drum	low-NOx burner; burner propane-fired; burner with flu gas recirculation (FGR); good burner combustion practice	40 ppmvd (at 3% O_2); 0.07 lbs/MMBtu
	Generator (I.C.E.)	turbocharger; aftercooler	4.20 gr/bhp-hr
CO	Drying Drum	burner propane-fired; good burner design & combustion practice	400 ppmvd (at 3% O_2); 0.33 lbs/MMBtu
	Generator (I.C.E.)	(none)	(none)
Pollutant	**Emission Unit / Point**	**BACT Technology / Equipment**	**BACT Performance Standard**
ROC	Drying Drum	burner propane-fired; good burner combustion practice	126 ppmvd (as CH_4); 0.11 lbs/MMBtu
	Asphalt Silo Filling -- drag conveyor	enclosed and/or blue smoke filter pack	approved design & operation; filter replacement requirement
	Asphalt Load-Out -- product-into-truck	shroud and/or blue smoke filter pack	approved design & operation; filter replacement requirement
	Generator (I.C.E.)	(none)	(none)
I.C.E.: internal combustion engine (diesel-fired) ppmvd: Parts Per Million, Volumetric Dry MMBtu: One million British Thermal Units Source: SCAQMD 2011a			

Fugitive dust control is achieved using water spray equipment (tubing; nozzles; pumps; sprinklers) retrofitted on operation equipment or placed on dust sources and maintained to effectively satisfy the assessed control efficiency. Fugitive dust from haul roads due to vehicular

traffic and high winds is controlled by water spray (by an on-site water truck) and/or road dust suppressant application.

c) The project's measured maximum emission rates are expected to produce a cumulative net increase of the pollutants PM-10 and ozone, which are "moderately" non-attainment for Shasta County, according to CARB. According to SCAQMD Rule 2:1 – New Source Review, Part 500:

> *A criteria pollutant air quality impact analysis can be performed to determine if the emissions from a new or modified emissions unit will cause a violation of a criteria pollutant ambient air quality standard or will cause a significant impact to the surrounding population. Also, a cumulative impact analysis can be performed to determine if this emission unit's potential to emit, in association with current emissions produced by neighboring facilities, will cause a violation of an ambient air quality standard and/or will cause a significant cumulative impact to the surrounding population.*

However, the ATC/PTO application evaluation (SCAQMD 2011a) concluded the following regarding the cumulative effects of criteria pollutant increases:

> *A criteria pollutant air quality impact analysis or a cumulative impact analysis is not prudent for this new emissions unit based on the following determinations:*
>
> *(a) review of the results of the calculated criteria pollutant emissions will not cause a violation of an ambient air quality standard;*
>
> *(b) the assessment of the plant proximity to surrounding receptors (ie: exposure factor based on pollutant emission rate versus distance to nearest receptor); and*
>
> *(c) the assessment of the plant proximity of a neighboring industrial facility (ie: exposure factor based on pollutant emission rate versus distance to nearest industry).*

Although SCAQMD concluded that a cumulative impact analysis is not appropriate for the HMA plant emissions, the agency included permit conditions in the facility's ATC/PTO to ensure that, upon completion of the HMA plant, best available control technology is applied and maintained during all operations of the facility. In accordance with EPA New Source Performance Standards (NSPS), permit conditions were also included for emission limits, reporting requirements, and recordkeeping requirements. The recordkeeping and reporting requirements are the tangible evidence of proper operating procedures and effective emissions controls. SCAQMD determined that ongoing enforcement of those permit conditions, implemented as mitigation measures, would reduce air pollutant emissions to levels that are less than significant. The permit conditions are stated in the SCAQMD ATC/PTO and *"serve as the agency-adopted reporting and monitoring program* [under CEQA] *as to compliance to the mitigation measures required"* (SCAQMD 2011a, p. 14). Those measures remain applicable and enforceable by the SCAQMD during the 18-month PTO period. No additional operating conditions or mitigation measures are warranted and cumulative net increases of criteria are less than significant.

d) According to the SCAQMD, no sensitive receptors have been identified adjacent to the HMA plant site. The nearest residential receptor to the HMA plant site is approximately 1,600 feet to the south. As required in the amendments to the Standard Specifications Section 14-9 Air Quality, the Contractor must also comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the Canyonero 2R Project contract, including those provided in Govt. Code §11017 (Pub. Cont. Code § 10231). Compliance with such regulations began before commencing the Canyonero 2R highway maintenance activities and extends throughout their completion, including the duration of the HMA plant operation. The Contractor is also implementing measures to prevent and alleviate dust by applying water, dust palliative, or both.

The bridge maintenance activities that were previously approved could generate some hazardous air emissions, which are addressed in *Section VIII. Hazards and Hazardous Materials*. As indicated in that section, all potential public health effects related to air emissions are unrelated to the HMA plant operation and are mitigated to levels that are less than significant. Air toxics from the HMA plant are discussed below.

Air Toxics

The ATC application evaluation by SCAQMD (2011a) analyzed hazardous air pollutants (HAPs) and toxic air emissions under several policies, as presented below:

- **SCAQMD Rule 2:3 – Toxics New Source Review:** This policy establishes guidelines for toxics risk assessment. The purpose of this rule is to require the implementation of T-BACT (best available control technology for toxics) at any constructed major source of a HAP. A major source of a HAP is defined as a stationary source that has the potential to emit ten tons per year or more (≥ 10 tons/yr) of a single HAP or twenty-five tons per year or more (≥ 25 tons/yr) of any combination of HAPs. The guidelines state that the quantitative evaluation of a facility's toxic pollutant emissions may be performed as a screening health risk assessment (SHRA) or as a refined health risk assessment (HRA). Given the results of the risk assessment, T-BACT will be required if the cumulative toxic pollutant emission cancer risk is found to be greater than or equal to one per million population (≥ 1.00 / 10^6) and/or the cumulative non-cancer hazard index is found to be greater than or equal to one (≥ 1.00).

  Evaluation Procedures: The emission assessment of the asphalt drum-mix facility was found to produce HAPs during the aggregate heating process (propane combustion); asphalt oil storage tank heating (asphalt oil volatilization); transfer processes of silo filling, load-outs, and asphalt storage (asphalt volatilization); and operation of the electricity generator (engine diesel combustion). As a conservative approach, SCAQMD performed a SHRA with Screen-3 air dispersion modeling (for maximum 1-hour concentration) of toxic pollutant emissions. Based on operation parameters (operation schedule and production rate), SCAQMD determined that the toxic emissions produced by the asphalt volatilization of the silo filling / load-out / asphalt storage processes and by the diesel combustion of the asphalt oil tank heater would be insignificant in the total toxic emission results; therefore, those emissions sources were not quantified in the SCAQMD's toxic assessment. The actual plant operation would be approximately 100 days/year, 8 hours/day for 2 years. The model was run, however, under the assumption that the plant would operate 365 days/year, 24 hours/day for 70 years, yielding a conservative exposure factor of 2.61 x 10^{-3}.

  Evaluation Results: The model run results found a one-hour maximum concentration of 7.87 µg/m^3 for the baghouse stack, and 0.51 µg/m^3 for the engine stack. Calculations for the annual maximum cancer risk using the model run results, process rate, toxic pollutant types produced, toxic pollutant types emission factors, and one-hour to annual conversion factor found an annual maximum cancer risk of **101.51 x 10^{-6}.** With the exposure factor (2.61 x 10^{-3}), annual maximum cancer risk totaled **0.27 x 10^{-6}**. This number is less than the threshold value which would trigger the requirement for application of T-BACT. In addition, calculation results for the emission rate of a single HAP or a combination of HAPs found that this source will not be classified as a major source and thereby would not trigger T-BACT.

  The evaluation results also apply to the State's AB 2588 air toxics "Hot Spots" program, which requires facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. A health risk is considered significant if the cancer risk exceeds 10 in a million or if non-cancer hazard indices are greater than 1, as

determined by a health risk assessment. The results of the SHRA found the maximum potential carcinogenic risk to be less than one (1) case per million. This risk number places the HMA plant operation in the "low-level" category and would thereby "exempt" the operation from any regulatory requirements of this program.

- **SCAQMD Rule 3:2 – Specific Air Contaminants:** This policy places quantitative limits on emissions of rule-specific contaminants from any single source.

  Evaluation Results: SCAQMD determined the asphalt drum-mix plant to be a stationary source with multiple point sources of emissions discharging rule-specific air contaminants (pollutants). The rule-specific pollutants (with emission limits) include PM10 (≤ 0.05 gr/dcsf), SOx (≤ 200 ppm), NOx (≤ 300 ppm), and opacity (≤ 40%). Based on the potential to emit calculations performed under Rule 2:1, SCAQMD concluded that there will be no exceedances of these pollutant emission limits. The opacity limit, in regard to the relevant point sources, would not be exceeded with implementation of fugitive dust emission control methods by the plant operator and/or based on calculated emission control efficiencies specified by the equipment or system.

- **SCAQMD Rule 3:28 – Stationary Internal Combustion Engines:** This rule calls for pollutant emission limitations of NOx and CO, administrative requirements, and compliance testing requirements for the operation of a gaseous-fueled or liquid-fueled stationary internal combustion engine within SCAQMD jurisdiction.

  Evaluation Procedures: The Applicant submitted information to SCAQMD regarding the project's single electricity generator, integrated with and powered by a diesel-fired (compression-ignited) internal combustion engine.

  Evaluation Results: Upon review of specifications, operation parameters and support documentation, SCAQMD determined that the engine would be exempt from and not subject to rule emission limitations and compliance testing requirements. However, administrative requirements include maintenance of engine operating logs and specific submittals to SCAQMD. Additionally, submitted documentation confirmed that the engine is currently registered under the portable equipment regulation program (PERP) and meets Tier 2 standards, thus exempting it from CCR Title 17 Section 93115 – Airborne Toxic Control Measure For Stationary Compression Ignition Engines.

The Lead Agency concurs with SCAQMD's conclusion that the Project does not expose sensitive receptors to substantial pollutant concentrations, including hazardous air pollutants. Impacts are less than significant.

e) The SCAQMD has determined that the Project would not cause air emissions that would create objectionable odors affecting a substantial number of people. The only potential source of odors may be diesel exhaust from trucks and from the hot-mix asphalt plant. The asphalt plant would be equipped with blue smoke filters that would capture odor fumes and effectively abate any odors. Given that the HMA plant is operated in a rural area where the nearest residence is 0.3 mile away and the nearest cluster of several residences is about one mile away, odor impacts would not be significant.

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified	☐	☐	☐	☒

as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) The Project area is along Interstate 5, generally from 1.5 mile south of Dog Creek Bridge to 0.6 mile north of Sims Road Undercrossing within the Sacramento River Canyon. It is in the Eastern Klamath Mountains sub-region of the Klamath Mountains section. The dominant plant community is mixed conifer series with Ponderosa pine (*Pinus ponderosa*), black oak (*Quercus kelloggii*), and Douglas fir (*Pseudotsuga menziesii*) being the dominant overstory species. Dominant shrubs are Manzanita and buckbrush. Grasses included brome, oats, and ryegrass.

In June 2005, a Caltrans biologist consulted the California Natural Diversity Database (CNDDB) with Rare Find to map and create a list of "target" species that might be found in the Project area. Based on the maps and data, the biologist conducted a pedestrian survey of the Project study area between PM R44.4 and R58.0 to determine suitability as habitat for those target species. Parking, staging, and stockpile locations were identified and surveyed. If suitable habitat was present for a species, then those specific species were searched out in the field survey. Although the survey extended south to PM R44.4, it did not cover the entire Riverview Disposal Site (PM R44.14 to R44.44), which is the HMA plant site. Nevertheless, the Riverview Disposal Site had been grubbed and graded and was in use prior to any element of the Canyonero 2R roadway rehabilitation project, as discussed below.

The survey findings were documented in a Caltrans Biological Survey Report (BSR) dated June

10, 2005. Within the Project area, habitat was found for Shasta clarkia, Scott Mountain fawn lily, Shasta snow-wreath, and the three-leaved beardtongue; however, no individuals of these species were found. The 2005 BSR confirmed that the Project would have no 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 CDFG or U.S. Fish and Wildlife Service. Although an active raptor nest was found approximately three miles north of the HMA plant site, the 2005 BSR determined that Project activities should have no effects on a nesting bird. All activities under the Project are subject to the provisions described in checklist item c) below regarding migratory and nesting birds.

In March 2010, Caltrans prepared an Addendum (BSR Addendum #1) to the 2005 BSR to address potential impacts to biological resources resulting from the following added elements to the Project:

- Deck maintenance on fourteen bridges at ten locations;
- Installation of information systems at five locations;
- Installation of fifteen large information signs; and
- Extension of the project limits to include postmiles R44.0/R44.4.

The field survey for the added elements found evidence of bats at two bridges and an undercrossing. Overall, the possibility of affecting listed plant or wildlife species was determined to be minimal since the added elements were on pavement or, if off pavement, within shoulder backing, in fill, or in cuts. Notably, although the extension of the project limits encompassed the Riverview Disposal Site at PM R44.14/R44.44, no sensitive biological resources were found in any portion of the added area.

In May 2011, Caltrans prepared another Addendum (BSR Addendum #2) to the 2005 BSR to address potential impacts to biological resources resulting from the following added elements to the Project:

- Addition of five new signs, four of which require electrical connections to nearby power;
- Electrical connections to six previously approved signs; and
- Repairing a section of slope bank that slipped onto the highway.

Caltrans' field survey did not identify sensitive plants or wildlife species, and the added elements were on pavement or within shoulder backing, in fill, or in cuts. For those reasons, BSR Addendum #2 did not recommend biological mitigation or special conditions for the added elements. Although subsequently determined to be part of the May 2011 added elements, the siting of the HMA plant at the Caltrans Riverview Disposal Site was not considered in BSR Addendum #2 because "[T]*he location was environmentally reviewed in September 2003 for the permanent disposal of material generated during maintenance and construction related activities. The contractor will restore the site to pre-construction conditions and is responsible for obtaining any state, county or local permits required for installing and operating the plant.*"

Nevertheless, in November 2011, Caltrans prepared BSR Addendum #3 to the 2005 BSR to definitively address potential impacts to biological resources resulting from the contractor's requested use of State right-of-way to install the temporary HMA plant. The HMA plant site is adjacent to Interstate 5 and is approximately 645 horizontal feet from the Sacramento River. With regard to the HMA plant location at the Caltrans Riverview Disposal site, Addendum #3 states that "[it] *is a fill area that was created during the construction of Interstate 5. It has been graded to create a flat area with access and egress roads at either end. The location was environmentally reviewed in September 2003 to use the site for permanent disposal of material generated during maintenance and construction related activities."*

BSR Addendum #3 included database reviews of State and federal special status species in the vicinity and, consistent with the prior biological fieldwork and records reviews, found that most

within the Sacramento River Canyon are tied to mesic habitats. The California wolverine (*Gulo gulo*) sighting shown on the CNDDB was listed as "suspect" while the foothill yellow-legged frog (*Rana boylii*) sightings are from the Sacramento River. The HMA plant was determined to have no effect on the river or species found there. It was further concluded that there would be no significant impacts to biological resources by using the Riverview Disposal Site for HMA plant purposes provided standard storm water BMPs are used. No minimization, avoidance, or mitigation measures for biological resources are recommended.

b) The *District 2 Maintenance Project Programmatic Categorical Exemption* (MPPCE) dated May 13, 2002, granted a CEQA exemption for various routine, minor, major, and capital maintenance projects at various locations on the State highway system. Among the qualifying criteria for the exemption are that no construction materials or other debris will be allowed to enter any stream, river, or lake as per the Memorandum of Understanding between Caltrans and California Department of Fish and Game, dated January 12, 1993. The MOU further required that excess material be disposed in an approved Caltrans or public disposal site. In the September 18, 2003 CEQA review and approval of the Riverview Disposal Site, Caltrans proposed to develop the site for permanent disposal of material generated from routine maintenance and construction activities. The environmental determination found the activity to be covered under the 2002 MPPCE, and stated that all work would also comply with the Statewide Storm Water Management Plan and District 2 Disposal Site Management Plan. Therefore, all subsequent vegetation removal, grading, excavation and use of the Riverview Disposal Site, now serving as the HMA plant site, was conducted according to inter-agency agreements and environmental regulations in place at that time.

The BSR and subsequent three Addenda have indicated that the Project, including the siting of the HMA plant and all added elements, would have no impact to water quality due to the nature of the projects, the distance to water sources, and the standard work restrictions imposed for the various types of activities. As discussed in *Section IX. Hydrology and Water Quality*, a Water Pollution Control Program (WPCP) is implemented for all regulated activities under the Project, with the exception of the HMA plant, which is subject to a Storm Water Pollution Prevention Plan (SWPPP). With the continued implementation and monitoring of measures protective of water, soils and biological resources, the Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community. The Project will result in no impacts.

c) Prior to its development and use as the Riverview Disposal Site, the HMA plant site was confirmed by Caltrans to be free of federally protected wetlands as defined by Section 404 of the Clean Water Act. As such, no impact will occur.

d) The 2010 *Notice To Bidders and Special Provisions* contains the following provisions regarding migratory and nesting birds:

> *Protect migratory and nongame birds, their occupied nests, and their eggs.*
>
> *The Department anticipates nesting or attempted nesting from February 15 to September 1.*
>
> *The federal Migratory Bird Treaty Act, 16 USC § 703–711, and 50 CFR Pt 10 and Fish & Game Code §§ 3503, 3513, and 3800 protect migratory and nongame birds, their occupied nests, and their eggs.*
>
> *The federal Endangered Species Act of 1973, 16 USC §§ 1531 and 1543, and the California Endangered Species Act, Fish & Game Code §§ 2050–2115.5, prohibit the take of listed species and protect occupied and unoccupied nests of threatened and endangered bird species.*
>
> *The Bald and Golden Eagle Protection Act, 16 USC § 668, prohibits the destruction of bald and golden eagles and their occupied and unoccupied nests.*

If migratory or nongame bird nests are discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:

1. *Stop all work within a 100-foot radius of the discovery.*
2. *Notify the Engineer.*

The Department investigates. Do not resume work within the specified radius of the discovery until authorized.

When ordered, use exclusion devices, take nesting prevention measures, remove and dispose of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation, or perform any combination of these.

Prevent nest materials from falling into waterways.

The bird protection requirements are followed for all activities pursuant to the Project, including operation of the HMA plant. With their continued implementation, the listed requirements will eliminate potential impacts.

e/f) Prior to its development and use as the Riverview Disposal Site, the HMA plant site was confirmed by Caltrans to be consistent with, or free of any natural resources subject to, approved habitat conservation plan and policies or ordinances protecting biological resources. Continued operation of the HMA plant would have no further effect; therefore, the Project will result in no impacts.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a/b) A Caltrans archaeologist prepared a Screened Undertaking Review for the Project, dated April 29, 2010, to address the asphalt concrete (AC) and HMA overlays proposed between PM 44.0 and 56.2, and between PM 56.2 and 58.0, respectively. The review also addressed general maintenance work at 14 bridges, and installation of highway appurtenances, including flashing beacon signs, a new roadside highway advisory radio system, CCTV cameras, weather stations, upgrading metal beam guardrail and installation of overhead highway informational signs.

The screening process included a cultural resource inventory conducted to satisfy requirements of the National Environmental Policy Act (NEPA) of 1969, Section 106 of the National Historic

Preservation Act of 1966 (as amended August 5, 2005), and the California Environmental Quality Act (CEQA) of 1970. More specifically, its purpose was to identify and evaluate historic properties found within the Project limits and to assess effects to the properties that may result from that project. The historic property identification effort was conducted in accordance with the policies and procedures outlined in the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (PA).*

On February 18, 2010, a Caltrans archaeologist surveyed the areas where the highway appurtenances and information signs would be installed. One of the highway information signs was proposed at PM 46.0. The survey found that entire study area had been altered by previous highway construction and maintenance activities. All sign locations were in areas of large cuts or fills and would not affect cultural resources. Within these areas ground visibility varied from 70 to 100 percent open ground. The 14 bridges included in the study area were listed as Category 5 bridges in the Statewide Historic Bridge Inventory.

In March 2010, an in-house record search of the Caltrans Cultural Database was performed, followed by a full record search at the Northeast Center of the California Historical Resources Information System (CHRIS). As a subset of the larger record search, the following Caltrans reports were found to have studied the HMA plant site (PM 44.14/44.44) in whole or in part for cultural resources: McGann (2000 EA 02-374700; PM 43.9/45.54 & 52.25/55.9), Slettleand (1983 EA 02-041733; PM 43.9/56.8), and Adamson (2005, EA 02-1C8700; PM 44.0/58.0). In total, forty (40) previously recorded archaeological sites, both historic and prehistoric, and nine (9) cultural resource studies were previously recorded along the 14-mile Canyonero 2R stretch of Interstate 5. However, it was determined that a vast majority of the sites were located outside of the State right-of-way. Thus, the Screened Undertaking Review determined that no cultural resources would be affected by the Project, which included development and use of the Riverview Disposal Site.

Despite the probability of no impact to cultural resources, it is Caltrans' policy that if previously unidentified cultural materials are unearthed during construction, work will be halted in that area until a qualified archaeologist can assess the significance of the find. Therefore, all site preparation and ground-disturbing activities for the Riverview site were conducted pursuant to Caltrans' provisions for cultural resources, including procedures for monitoring, work stoppage, notification, resource protection, and investigation or recovery. No cultural resources were found during development of the Riverview Disposal Site, and the continued use of the site for the temporary HMA plant poses no additional potential to disturb historical or archaeological resources; therefore, the Project will result in no impacts.

c) It is Caltrans' policy that if previously unidentified paleontological resources are unearthed during construction, work will be halted in that area until a qualified paleontologist can assess the significance of the find. Therefore, all site preparation and ground-disturbing activities, including for the Riverview Disposal Site, were conducted pursuant to Caltrans' provisions for paleontological resources, including procedures for monitoring, work stoppage, notification, resource protection, and investigation or recovery. No paleontological resources were found during development of the Riverview Disposal Site, and the continued use of the site for the temporary HMA plant poses no additional potential to disturb paleontological resources; therefore, the Project will result in no impacts.

d) Caltrans defines 'archaeological resources' as *"Remains of past human activity, including historic and prehistoric material (e.g., tools and tool fragments, hearth and food remains, structural remains, and human remains)."* Since no cultural resources were found during development of the Riverview Disposal Site, and the continued use of the site for the temporary HMA plant poses no additional potential to disturb archaeological resources, the Project will

result in no impacts.

VI. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a-i) The State Geologist has not issued an Alquist-Priolo Earthquake Fault Zoning Map for the Project or, in particular, the HMA plant site vicinity. There is no evidence of a known fault on or near the Project area. The nearest known active faults are approximately 40 miles east, near the town of Burney. Because there are no known faults in the project vicinity, there is no impact related to the rupture of a known fault.

a-ii) The Project area is within a seismically active region and may be subject to strong ground shaking from earthquake events along major regional faults. Faults located 40 miles east and 50 miles south of the Project are capable of generating significant seismic activity. The relatively short length of the faults and their distance from the Project reduces potential impacts to the highway and HMA plant. With the application of Caltrans engineering standards and applicable California Building Code requirements, the Project will result in no impacts associated with strong seismic ground shaking.

a-iii) The Project includes a maintenance overlay to an existing highway, along with the temporary HMA plant, the site of which was previously graded and stabilized for use as a materials disposal site. With the application of Caltrans engineering standards and applicable California Building Code requirements, which includes an evaluation of liquefaction risk and inclusion of appropriate design features, if necessary, there is no impact resulting from seismic-related ground failure, including liquefaction.

a-iv) The Project includes a maintenance overlay to an existing highway, along with the temporary HMA plant, the site of which was previously graded and stabilized for use as a materials disposal site. With the application of Caltrans engineering standards and applicable California Building Code requirements, which includes an evaluation of landslide risk and inclusion of appropriate design features, if necessary, there is no impact resulting from landslides.

b) A WPCP and SWPPP with Best Management Practices (BMPs) is in effect for the Project, including the HMA plant site. BMPs in use control wind and water erosion. See Section IX, Hydrology and Water Quality, for additional information. There is no impact relating to soil erosion or the loss of topsoil.

c) The Project includes a maintenance overlay to an existing highway, along with the temporary HMA plant, the site of which was previously graded and stabilized for use as a materials disposal site. These prior actions have created a site that is not at elevated risk of instability. With the application of Caltrans engineering standards and applicable California Building Code requirements, which includes an evaluation of geotechnical stability and inclusion of appropriate design features, if necessary, there is no impact relating to soil instability resulting in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.

d) The Project includes a maintenance overlay to an existing highway, along with the temporary HMA plant, the site of which was previously graded and stabilized for use as a materials disposal site. With the application of Caltrans engineering standards and applicable California Building Code requirements, which includes an evaluation of soil expansion risks and inclusion of appropriate design features, if necessary, there is no impact resulting from expansive soil.

e) The Project does not incorporate septic tanks or alternative wastewater disposal systems. There are no impacts relating to the use of septic systems or alternative wastewater disposal systems in soils incapable of adequately supporting their use.

VII. GREENHOUSE GAS EMISSIONS:
Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential
b) Conflict with an applicable plan, policy or regulation adopted for the	

purpose of reducing the emissions of greenhouse gases? effects of the project.

With the passage of the following legislation, including State Senate and Assembly Bills and Executive Orders, California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level.

- **Assembly Bill 1493 (AB 1493), Pavley. Vehicular Emissions: Greenhouse Gases (AB 1493), 2002**

  AB 1493 requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year. In June 2009, the U.S. Environmental Protection Agency (U.S. EPA) Administrator granted a Clean Air Act waiver of preemption to California. This waiver allowed California to implement its own GHG emission standards for motor vehicles beginning with model year 2009. California agencies will be working with Federal agencies to conduct joint rulemaking to reduce GHG emissions for passenger cars model years 2017-2025.

- **Executive Order S-3-05**

  Signed on June 1, 2005 by Governor Arnold Schwarzenegger, the goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010; 2) 1990 levels by the 2020; and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

- **Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006:**

  AB 32 sets the same overall GHG emissions reduction goals as outlined in Executive Order S-3-05, while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team.

- **Executive Order S-01-07**

  Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this Executive Order, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by 2020.

- **Senate Bill 97 (Chapter 185, 2007)**

  SB 97 required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. The Amendments became effective on March 18, 2010.

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG.[4] In assessing cumulative impacts, it must be

[4] This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March

determined if a project's incremental effect is "cumulatively considerable." See California Environmental Quality Act (CEQA) Guidelines sections 15064(h)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan contains the main strategies California will use to reduce GHG. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (Forecast last updated: 28 October 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan are implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human-made GHG emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.[5]

The Project is a highway maintenance project consisting of an asphalt overlay on I-5 near Lakehead from 1.5 miles south of Dog Creek Bridge to 0.6 miles north of the Sims Road Undercrossing in Shasta County, as well as the installation of a HMA plant within the Project right of way. There will be no change to the existing lane configuration or capacity of the highway. Since the project will not increase capacity or vehicle hours travelled, no increases in operational GHG emissions are anticipated. While emissions of GHGs during construction are unavoidable, there will likely be long-term benefits through improved safety, improved traffic operations, elimination of current maintenance operations, and smoother pavement surface following completion of the project.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

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

By locating an HMA plant at the beginning postmile of the Project, vehicle miles traveled (VMT) from more distant HMA sources will be eliminated and emissions will be avoided as well. The

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5, 2007), as well as the SCAQMD (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

[5] Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

hauling distances from other HMA facilities would vary. Nonetheless, the premise of concurrent VMT and emissions reductions is well documented[6] and does not require further quantification.

The ATC/PTO application evaluation (SCAQMD 2011a) indicates that fugitive emissions are expected to be produced from several point sources during the process of construction, installation, and operation of the asphalt drum-mix plant. The specific point sources were listed in the process equipment and emission control description section of the ATC/PTO application evaluation. The activities include earth-moving, construction, demolition, bulk storage, and conditions resulting in wind erosion. Permit conditions stated in the ATC and PTO are pertinent to these sources and state opacity limits and dust suppressant types (i.e., water spray; water truck). Emission control devices and methods will be in place during all operations, and the opacity limit will be ascertained by visual observations per EPA Method 9.

CEQA Conclusion

While construction will result in a slight increase in GHG emissions during construction, it is anticipated that any increase in GHG emissions due to construction will be offset by the improvement in operational GHG emissions. While it is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

AB 32 Compliance

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement the Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a $222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including $100.7 billion in transportation funding during the next decade. The Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together are expected to reduce congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO_2 reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

The Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. The Department is working closely with local jurisdictions on planning activities; however, the Department does not have local land use planning authority. The Department is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. The Department is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on

[6] California Department of Transportation. February 2007. *Construction Aggregate Supply Limitations: Estimates of Economic Impact.*

the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by U.S. EPA and ARB. Lastly, the use of alternative fuels is also being considered, and the Department is participating in funding for alternative fuel research at UC Davis.

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

involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

a) As discussed in *Section IX. Hydrology and Water Quality*, a SWPPP will be implemented at the HMA plant site per the Industrial General Permit. A Water Pollution Control Program WPCP will be implemented on the remainder of the project. The best deterrent to the creation of hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials is proper training. Therefore, storm water pollution control training for all project managers, supervisory personnel and employees, including subcontractors, covers rules and regulations, as well as implementation and maintenance procedures for:

- Material and spill pollution prevention and control
- Waste management
- Non-storm water management
- Identifying and handling hazardous substances
- Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances.

The SWPPP is designed to control potential sources of water pollution before they come in contact with storm water systems or watercourses. This is achieved by controlling material pollution and managing waste and non-storm water at the job site by implementing effective handling, storage, use, and disposal practices. Among those practices, the SWPPP oversees daily inspections involving hazardous materials and waste delivery, storage, transport and disposal. Weekly training meetings for employees cover the procedures listed above, as well as the following:

- Best management practices (BMPs) that are required for work activities during the week
- Material delivery, storage, use, and disposal
- WPC BMP deficiencies and corrective actions

Specific to material management and storage, the Contractor implements the following practices while taking delivery of, using, or storing any of the following materials:

- Hazardous chemicals including acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Soil stabilizers and binders
- Detergents
- Petroleum materials including fuel, oil, and grease
- Asphalt components and concrete components
- Pesticides and herbicides

Procedures for material storage are specified in the *Notice To Bidders and Special Provisions* and generally require that liquids, petroleum materials, and substances listed in CFR Title 40, Parts 110, 117, and 302 be stored in secondary containment facilities, appropriately labeled and segregated, protected from wind and rain, and routinely inspected.

Procedures for stockpile management are also specified in the *Notice To Bidders and Special Provisions* and require that potential water pollution from stockpiled material, including soil, paving material and pressure treated wood, be reduced or eliminated. As such, stockpiles are located at least 50 feet from concentrated flows of storm water, drainage courses, and inlets. In compliance with WPC practices, active and inactive soil stockpiles are covered with soil stabilization measures, plastic sheeting or geosynthetic fabric, and surrounded with a linear sediment barrier. These measures also apply to Portland cement concrete rubble, asphalt

concrete, HMA and HMA rubble, aggregate base, and aggregate sub-base stockpiles. Cold mix asphalt concrete stockpiles are placed on an impervious surface, covered with impermeable material, and protected from run-on and runoff.

Specific to spill prevention and control, the Contractor implements spill and leak prevention procedures for chemicals and hazardous substances stored at the job sites. Employees trained in emergency spill cleanup procedures are present during the unloading of hazardous materials or chemicals. Containment and clean up of spills of petroleum products, sanitary and septic waste substances listed under CFR Title 40, Parts 110, 117, and 302 is the responsibility of the Contractor. Procedures for minor spills include containment of the spread of the spill; recovery of the spilled material by absorption; cleanup of the contaminated area; and disposal of the contaminated material promptly and properly.

All spills are reported to the WPCP Manager. Semi-significant and significant or hazardous spills require in-depth procedures that are specified in the *Notice To Bidders and Special Provisions*. Additional spill response procedures may include, but are not limited to, the following:

- Earthen dike containment;
- Excavation of contaminated soil for disposal;
- Covering the spill with plastic or other material to prevent contaminated storm runoff;
- Immediately obtaining the services of a spill remediation contractor or hazardous material team;
- Telephone notification of the local emergency response team, county officials, and/or other agencies (e.g. Highway Patrol, CalOSHA, RWQCB, etc.) as appropriate.

In the unlikely event that contaminated soils from spills or leaks are identified during routine inspections, as evidenced by discoloration, odors or differences in soil properties, soil would be sampled and tested by a certified laboratory. If levels of contamination are found to be hazardous, the soil would be handled and disposed of as hazardous waste. Actions would also be taken to prevent the flow of water, including groundwater, from mixing with contaminated soil by using one, or a combination of, the following: berms, cofferdams, grout curtains, freeze walls, and concrete seal course. If water mixes with contaminated soil and becomes contaminated, the water would be sampled and tested by a certified laboratory. If levels of contamination are found to be hazardous, the water would be handled and disposed of as hazardous waste.

With continued implementation of the mandatory safeguards and training programs, the risk of hazard through the routine transport, use, or disposal of hazardous materials will result in no impact.

b) All current and future Project construction activities, including those at the HMA plant site, are subject to the following ongoing protocols:

1) Lead in Soil (Standard Special Provision [SSP] 15-027) – The Contractor is required to implement a lead compliance plan prepared by a Certified Industrial Hygienist. It must be used whenever any disturbance of earth material (e.g., soil) could occur that may result in lead exposure and disposal in a permitted landfill is not required.

2) Thermoplastic/Paint Stripe/Pavement Marking – The removal of any striping/marking, concurrent with the removal of existing AC, will require a lead compliance plan. If yellow thermoplastic will be removed as a separate operation SSPs to address hazardous waste (CCR Title 22) regulatory requirements is required.

3) Naturally Occurring Asbestos (NOA) – NOA excavation and disposal is regulated by the State of California Air Resources Board (CARB) and any work will require notification to and appropriate permits regarding dust management of NOA containing material. All

work which will disturb native material must conform to the requirements of the CARB-Section 93105, Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations.

4) Treated Wood Waste (TWW) – Treated wood waste (TWW) (guard rail posts, sign posts, crib walls, etc.) may not be relinquished to the contractor and must be disposed of at an appropriately permitted disposal facility or may be reused on the originating project in a manner consistent with the intended use for the preservative. In addition, proper handling and storage of TWW is required prior to disposal.

Due to the mandatory safeguards and training programs in place throughout the Canyonero 2R Project, and for the reasons described in checklist item a) above, the Project activities, including the HMA plant, do not pose a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) The highway maintenance portions of the Project include some activities that could generate potentially hazardous emissions. However, those activities would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Project will result in no impact on schools.

Although exempted from further CEQA review, activities such as multilayer polymer chip sealing for deck overlay work are subject to strict environmental protocols prior to and during construction. Before starting deck overlay work, the Contractor prepares and submits a public safety program identifying materials, equipment, and methods to be used. The work is subject to an airborne emissions monitoring plan prepared by a certified industrial hygienist. Emissions are monitored at a minimum of four points including the point of mixing, application, and the point of nearest public contact, as determined by the Engineer. An action plan is prepared for protection of the public when airborne emissions levels exceed permissible levels. At the completion of work, a report by the certified industrial hygienist with results of the airborne emissions monitoring plan is furnished to the Engineer. Similarly, the use of polyester resin binders for polyester concrete overlay work is also subject to a public safety plan and to static volatile emissions testing using SCAQMD Method 309-91. That activity has the added requirement to notify residences and businesses within 100 feet of the resin work locations, and to notify local fire and police officials at least seven days before starting work.

With continued implementation of the testing, monitoring, and response protocols currently in place throughout the Project area, including the HMA plant site, all potential public health effects related to air emissions are mitigated to levels that are less than significant.

d) An Initial Site Assessment[7] by the Caltrans District 2 Hazardous Waste Unit indicated that there are no issues regarding hazardous waste in any area of the Project, including the HMA plant site. It was also noted that the area of work is not within or adjacent to any site listed on the Cortese List of Hazardous Waste Sites.

e/f) Checklist items e) and f) in Section XII (Noise) confirm that the Project has no effect on the safety of people residing or working in the project area based on proximity to airports, since no public or private airports are located in the vicinity.

g) Based on the information in checklist item e) in Section XVI (Transportation/Traffic), the Project implements traffic management measures so impacts related to the adequacy of

[7] State of California Department of Transportation, District 2 Hazardous Waste Unit. Initial Site Assessment Memorandum. May 24, 2005.

emergency access will not occur. As such, the Project will have no impact on implementation of an adopted emergency response plan or emergency evacuation plan.

h) Any development, along with the associated human activity, in rural locations increases the potential of the occurrence of wildfires. The HMA plant will operate under comprehensive safety measures that comply with federal and state worker safety and fire protection codes and regulations and which minimize the potential for fires to occur during project operations. Given those operating parameters, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and no impact will result.

IX. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

a-f) This Project lies within the boundaries of the Central Valley Regional Water Quality Control Board (RWQCB). The road segment associated with this Project parallels the Sacramento River. The pertinent river segment is located upstream of Shasta Dam and is not included in the 2010 Clean Water Act Section 303(d) list for impaired water bodies. Project construction activities are covered under a Statewide General Storm Water Permit (Statewide Permit)[8] issued by the State Water Resources Control Board (SWRCB) to Caltrans. This permit regulates storm water and non-storm water discharges originating at Caltrans' properties, facilities, and activities. To comply with the Statewide Permit requirements, storm water management and water quality protection will be addressed implementing a WPCP.

Separately, a General Industrial Permit will cover all activities associated with the temporary HMA batch plant that will be used for the Project. The Contractor submitted a Notice of Intent (NOI) to obtain coverage under this permit. A SWPPP was developed to address all associated activities including soil disturbance occurring while setting up the HMA plant. All disturbed soil within the HMA plant site has been stabilized.

The primary purpose of this Project is to resurface and restore an existing paved four-lane roadway segment. This will be achieved by grinding an approximate 0.30 feet layer of existing pavement, and replacing it with HMA having an equal thickness. Additionally, Intelligent Transportation System (ITS) elements will be installed and overhead signs added. Other than incidental excavation required for installing the ITS elements and overhead signs, this Project does not include significant soil disturbing activities. Permanent impervious surface will not be added. The Project will not modify the existing drainage patterns or increase storm water runoff originating within its limits.

Existing drainage patterns will facilitate storm water management, including BMPs implementation. Storm water runoff drains from the roadway surface via both sheet-flow and asphalt concrete (AC) dike. The AC dike conveys concentrated flow to downside drains discharging to stable locations. Drain inlets collect runoff at the median. The existing drainage system provides ample opportunities to deploy any BMPs deemed necessary.

Implementing appropriate administrative measures (i.e. conducting work during non-rainy periods) and Construction Site BMPs, the scope of work, and the existing Project site conditions, will significantly reduce any potential for impacting water quality. Project characteristics will not trigger or add to any existing processes that deplete groundwater supply or alter recharge, or otherwise degrade water quality through erosion and sediment transport. Also, the Project will not significantly increase existing storm water runoff altering drainage patterns outside the Project limits.

Materials and equipment used during operations, and byproducts resulting from the Project have potential to generate pollutants. These could include fuels and lubricants, binders, and other chemicals, and asphalt grindings. Site Management BMPs and other WPCP measures (SWPPP measures within the HMA plant location) will address storage, transport, and handling of materials and byproducts. Site Management BMPs also include a contingency plan for responding to accidental spills. These BMPs will prevent chemical-pollutant potential impacts that could degrade water quality.

Specifically, the Contractor is managing work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems pursuant to the WPCP

[8] Order No. 99 - 06 - DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans); available at http://www.waterboards.ca.gov/water_issues/programs/storm water/caltrans.shtml

prepared for all project activities. The WPCP includes WPC practices for:

- Storm water and non-storm water from areas outside of the job site related to project work activities such as staging areas, storage yards and access roads;
- Activities or mobile operations related to contractor-obtained NPDES permits; and
- Construction support facilities (e.g., the HMA plant)

Discharges from manufacturing facilities such as the HMA plant must also comply with the general waste discharge requirements for the General Industrial Permit.[9] Therefore, the Contractor filed a NOI that was approved by the RWQCB for the operation of the HMA plant under the General Industrial Permit. As a construction support facility for the asphalt overlay portion of the Project, the HMA plant operations protect storm water systems and receiving waters from the discharge of potential pollutants by using WPC practices.

Implementation of the WPCP involves identifying work activities performed that could cause the discharge of pollutants in storm water; describing WPC practices associated with each construction phase; and identifying soil stabilization and sediment control practices for disturbed soil areas.

The WPCP also requires storm water training for project managers, supervisory personnel, and employees involved with WPC work, including subcontractors. Training covers WPC rules and regulations, as well as implementation and maintenance for:

- Temporary Soil Stabilization
- Temporary Sediment Control
- Tracking control
- Wind Erosion Control
- Material and spill pollution prevention and control
- Waste management
- Non-storm water management
- Identifying and handling hazardous substances
- Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances.

The WPCP is designed to control potential sources of water pollution before they come in contact with storm water systems or watercourses. This is achieved by controlling material pollution and managing waste and non-storm water at the job site by implementing effective handling, storage, use, and disposal practices. Among those practices, the WPC Manager oversees daily inspections involving hazardous materials and waste delivery, storage, transport and disposal. Section *VIII. Hazards And Hazardous Materials* addresses spill prevention and control procedures in place for chemicals and hazardous substances. Weekly training meetings for employees also cover:

- BMPs that are required for work activities during the week
- Material delivery, storage, use, and disposal
- WPC BMP deficiencies and corrective actions

Employee and contractor training records are submitted as per the *Notice To Bidders and Special Provisions,* and BMP status and inspection reports are submitted as per the WPCP requirements. In addition, the Notice to Bidders and contract Special Provisions specify the following methods

[9] Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, issued by the SWRCB for "Discharge of Storm water Associated with Industrial Activities Excluding Construction Activities."

of material management and erosion control:

- Materials are prevented from entering storm drain systems or watercourses by using approved covers and platforms to collect debris, and attachments on equipment to catch debris. Such materials include cementitious material, asphaltic material, aggregate or screenings, pavement chunks, shoulder backing, and methacrylate.
- Drainage inlets and manholes are covered and downstream watercourses are protected by using linear sediment barriers during sawcutting, grinding, paving and sealing and until those activities are completed and excess material has been removed.
- Asphalt trucks and equipment are not permitted to be coated with substances that contain soap, foaming agents, or toxic chemicals.
- When paving equipment is not in use, it is parked over drip pans or plastic sheeting with absorbent material to catch drips.
- Paved areas and roadways within the job sites are monitored for sediment and debris-generating activities such as clearing and grubbing, earthwork and other soil disturbance, vehicles entering and leaving the job site, and any work that causes offsite tracking of material. Sediment and debris are swept using hand or mechanical methods such as vacuuming.
- Temporary fiber roll (Type 1 or Type 2) lasting a minimum of one year after installation is used for sediment control. The fiber roll is maintained to provide sediment-holding capacity and to reduce runoff velocities. Sediment deposits, trash, and debris are removed as needed.
- Temporary silt fence consisting of geosynthetic fabric is also used for sediment control. Silt fencing is placed approximately parallel to the slope contour. Sediment deposits, trash, and debris are removed as needed to provide sediment-holding capacity and to reduce runoff velocities.
- Disturbed soil areas, particularly on slopes, are subject to application of hydroseed erosion control materials, including seed, fiber, commercial fertilizer and tackifier. All such activities must comply with Section 20-3, "Erosion Control," of the Caltrans Standard Specifications. The seed mix undergoes laboratory testing and must meet standards for species mix. Similarly, fertilizer meets a guaranteed chemical constituency for water quality control, and tackifier must be nonflammable and nontoxic to aquatic organisms. Coloring agents are biodegradable and nontoxic, free from copper, mercury, and arsenic.

The mandatory water quality and waste management procedures described above and implemented through contractor provisions, site inspections, and reporting ensure that storm water and non-storm water quality effects will result in no impact.

g-j) Prior to its contemplated use for the temporary HMA plant, the Project site was graded and prepared for use as a Caltrans disposal site. It is not located in a FEMA-designated or locally designated floodplain, nor is it an area subject to dam inundation or seiche. The site is a minimum of 200 feet above the normal water surface elevation of the Sacramento River. The project has no potential for impact due to flooding or dam inundation. No impacts will result.

X. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) The Project area, including the HMA plant site, is not located within an established community. There is no impact related to physically dividing an established community.

b) The Project area, including the HMA plant site, is owned by Caltrans and is therefore not subject to local land use regulations, including General Plan and zoning standards. The Project site is not within a coastal zone, and is not subject to a local coastal program. There is no impact related to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

c) According to the California Department of Fish & Game, there is no habitat conservation plan (HCP) or natural community conservation plan (NCCP) in effect on the Project site, including the HMA plant site. There is no impact related to a conflict with an applicable HCP or NCCP.

XI. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a) The U.S. Geological Survey Mineral Resources On-Line Spatial Data mapping service indicates that no metallic or nonmetallic mineral resources have been mapped on the Project site, including the HMA plant site. In addition, no active mines or mining claims are located on or in the immediate vicinity of the Project site. There is no impact related to the loss of availability of a known mineral resource.

b) The Project site, including the HMA plant site, is not indicated to have important mineral resource recovery sites in any local plans. There is no impact related to the loss of locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

XII. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or	☐	☐	☐	☒

noise ordinance, or applicable standards of other agencies?

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Current noise levels in the project vicinity are high due to the presence of the I-5 freeway. The nearest noise-sensitive receptor to the HMA plant site is a residence located 1,600 feet to the south. According to the Shasta County General Plan Noise Element (Tables N-I and N-II), 1996 and 2020 noise contour data for the segment of I-5 nearest the HMA plant site places the residence somewhere between the 60 dB and 65 dB noise contours.

The Project is not considered a Type 1 project as defined in 23 CFR 772, and therefore is not subject to a noise analysis and noise abatement criteria. The only potential noise impacts resulting from the Project would be construction noise, which would be temporary. Caltrans Special Provisions 7-1.01I (Sound Control Requirements) address construction noise.

The noise emissions of the temporary HMA plant have been quantified through reference noise level measurements completed for past, similar projects. These noise levels are described in Table XII-1.

Table XII-1. Typical Noise Emissions Levels for Hot-Mix Asphalt Plants

Noise Level	Distance from Center of Plant
85 dBA	50 feet (measured reference level)
78 dBA	100 feet
70 dBA	200 feet
63 dBA	400 feet
55 dBA	800 feet
46 dBA	1,600 feet
36 dBA	3,200 feet
24 dBA	6,400 feet
Note: dBA = A-weighted decibels Source: Giroux 2010	

Table X-II shows the composite noise levels corresponding to full operation of the plant, at various reference distances away from the center of the plant. These noise levels assume typical spherical spreading loss, which is -6 dB per each doubling of distance from the source. Since the surrounding lands have an absorptive ground surface, such as dirt, grass, bushes, and trees, the sound path is considered “soft-site” from an acoustical standpoint. Therefore, an extra ground

attenuation value of -1.5 dB has been added to the spreading loss per each doubling of distance from the source. To account for standard atmospheric absorption, an extra -1.5 dB has also been added to the spreading loss value at 1,000-foot distance intervals.

The existing noise level at the analyzed sensitive receptor exceeds 60 dBA as a result of freeway noise. The HMA plant's operational noise level at a distance of 1,600 feet is 46 dBA. Thus, the existing noise level exceeds that of the Project, including the HMA plant. Noise levels combine logarithmically; when there is already a high noise level, a new noise source must produce a very large increase in noise to impact the measured noise level at a receptor. Freeway noise levels are dominant at the sensitive receptor, and the Project would not add to the overall noise level.

Furthermore, the Project complies with all state, and local statutes and regulations related to noise control. Those regulations are embodied in the noise and vibration performance criteria with which the Contractor must comply, as provided in the *Notice To Bidders and Special Provisions*. A noise criterion implemented throughout the Project, including the HMA plant site, is that noise levels not exceed 86 dBA at 50 feet from any job site activities between the hours of 9 p.m. to 6 a.m. Additionally, internal combustion engines are equipped with manufacturer-recommended mufflers. Internal combustion engines are not operated on the job sites without the appropriate mufflers.

Since there is no substantial noise increase at the sensitive receptor, the Project will have no impact with respect to the exposure of persons to, or generation of, noise levels.

b) The processes employed on the Project site do not create any significant groundborne vibration or groundborne noise. There is no impact related to the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. For the Project area, the use of vibratory equipment (e.g., rollers, compactors, etc.) is subject to certain specifications or prohibitions, depending on their use. Those specifications are detailed in the *Notice To Bidders and Special Provisions* and apply to, but are not limited to, placement of subgrade enhancement geotextile; concrete batch testing; lime-stabilized soil compaction; HMA spreading and compacting; and concrete pavement consolidation. Continued compliance with those specifications will ensure that impacts remain less than significant.

c) As noted in a) above, the I-5 freeway produces a substantially higher noise level in the project vicinity than the proposed project would during operations. The new noise produced by the Project would not combine with the existing noise to substantially increase ambient noise levels. There is a less-than-significant impact relating to a permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

d) Operation of the HMA plant in particular does not create any substantial temporary or periodic increases in ambient noise levels. Since the project will not create or contribute to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, impacts are less than significant.

e) The Project is not located within the boundaries of the Shasta County Airport Land Use Compatibility Plan. According to the 2010 Regional Transportation Plan for Shasta County, Shasta County has four public-use airports (including one which was decommissioned in 2009). The nearest airport to the Project site is Benton Field, 24 miles to the south in Redding. Due to the Project's distance from any airport, there is no impact related to human exposure to excessive noise levels from a public or public-use airport.

f) The Project is not within the vicinity of any private airstrip. There is no impact related to human exposure to excessive noise levels from a private airstrip.

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

a) The Project involves maintenance to an existing roadway, and would not induce population growth in the area. There is no impact related to the induction of substantial population growth, either directly or indirectly.

b) The Project site, including the HMA plant site, is an existing roadway or disposal area, and does not contain existing housing. There is no impact related to the displacement of substantial numbers of existing housing.

c) The Project site, including the HMA plant site, is an existing roadway or disposal area, and does not contain any residences. There is no impact related to the displacement of substantial numbers of people.

XIV. PUBLIC SERVICES: 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:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) *Fire Protection.* Fire protection for the Project, including the HMA plant site, is provided by the Shasta County Fire Department/California Department of Forestry & Fire Protection (CAL FIRE) Shasta-Trinity Unit. The nearest fire station is Volunteer Fire Company (VFC) 54 in Lakehead, approximately 3 miles south of the Project site. Station 54 is served by 7 active volunteers and houses one Type II engine, one Type III engine, one rescue unit, one water tender, and two

fire/rescue boats. Project facilities would comply with all relevant elements of California Code of Regulations, Title 24, Part 9 (the California Fire Code). The Project incorporates access drives that are accessible to emergency equipment. The Project would not impact service ratios, response times, or other performance objectives related to fire protection.

Any development, along with the associated human activity, in rural locations increases the potential of the occurrence of wildfires. Comprehensive safety measures that comply with federal and state worker safety and fire protection codes and regulations would be implemented for the proposed project that would minimize the potential for fires to occur during Project operations. Because of the low probability and short-term nature of potential fire protection needs during operations, the Project would result in no impacts related to fire protection.

Police Protection. The Project, including the HMA plant site, is served by the Shasta County Sheriff's Office. The nearest sheriff's substation is located in Lakehead, three miles south of the Project site. Additional police protection along the I-5 corridor is provided by the California Highway Patrol, which has a station in Redding. The project could incorporate, as necessary, security fencing, entry lighting, and security camera systems, and would result in no impacts related to police protection.

Schools. The Project, including the HMA plant site, is located within the Gateway Unified School District. The School District has over 3,900 students in grades K-12. Students attend six traditional schools and four charter schools. Operation of the Project would place no demand on school services because it would not involve the construction of facilities that require such services and would not involve the introduction of a temporary or permanent human population into the area. There would be no impact related to the provision of new or modified schools.

Parks. The Project, including the HMA plant site, is located adjacent to the 2.1-million-acre Shasta-Trinity National Forest and recreational facilities on Shasta Lake. There are no local parks in the project vicinity; the nearest parks are in the City of Shasta Lake, 17 miles south of the site. Operation of the proposed facilities would place no demand on parks because it would not involve the construction of housing and would not involve the introduction of a temporary or permanent human population into the area. There would be no impact related to the provision of new or modified parks.

Other Public Facilities. The Project, including the HMA plant, would not result in an increased resident population or a significant increase in the local workforce. Based on this factor, the proposed project would not result in increased demand for public facilities. There would be no impact related to the provision of new or modified public facilities.

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

a) The Project, including the HMA plant, would not result in increases in local population that could result in increased use of neighborhood and regional parks or other recreational facilities.

There is no impact related to deterioration of parks or recreational facilities resulting from increased use.

b) The Project, including the HMA plant, does not include any recreational facilities, nor would implementation of the project require the construction or expansion of such facilities. There is no impact related to the need for construction or expansion of recreational facilities which could have an adverse physical effect on the environment.

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

a) The 2010 Regional Transportation Plan for Shasta County (RTP), prepared by the Shasta County Regional Transportation Planning Agency (SCRTPA), is the applicable plan governing transportation on the Project site. The RTP provides a range of measures of effectiveness for the performance of the circulation system, in topic areas such as safety, mobility/accessibility, reliability, and others. Both vehicular and non-vehicular modes of transport are discussed in the RTP. The Project will not conflict with the RTP and will not impede or interfere with the short- or long-range plans included therein. There is no impact related to conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

b) The SCRTPA is the congestion management agency for Shasta County. Congestion management measures are included in the RTP. The Project will not conflict with the RTP and will not impede or interfere with the short- or long-range plans included therein. There is no impact related to conflicts with the applicable congestion management program.

c) The Project, including the HMA plant site is not located near any airports. The nearest airport is Benton Field, located 24 miles south of the Project site in Redding. Due to the significant distance to the nearest airport, the project would not have any impact on air traffic patterns. The project would not result in an increase in air traffic levels. There is no impact related to a change in air traffic patterns.

d) The Project, including the HMA plant, does not include any design features or incompatible uses which could create a hazard related to traffic or transportation. Access to the HMA plant site in particular is provided by an existing widened and improved shoulder, allowing vehicles to safely decelerate from highway speeds. Caltrans implemented a traffic management plan during construction which established safety guidelines for any necessary temporary lane closures. There is no impact related to an increase in hazards due to design features or incompatible uses.

e) The Project, including the HMA plant, will not impede emergency vehicles along I-5, and will maintain adequate emergency access onsite. Access drives to the site are adequately sized to permit emergency vehicles access to the facilities. The 2010 *Notice To Bidders and Special Provisions* requires that at multilane locations, a minimum of one paved traffic lane, not less than 12 feet wide plus a 2-foot inside and 2-foot outside paved shoulder (equivalent of 16 feet of paved horizontal clearance), shall be open for use by public traffic in each direction of travel. Under certain circumstances, additional provisions are made for traffic control surveillance until traffic is moving at a free flow condition (traffic backup has dissipated). With those traffic management measures in place, impacts related to the adequacy of emergency access are less than significant.

f) The Project, including the HMA plant site, is in a rural area where public transit, bicycle, and pedestrian facilities are not widely available. The nearest public transit service is in Shasta Lake, 17 miles south of the HMA plant site in particular. The portion of the I-5 adjacent to the site is available for use by bicyclists. Alternative transportation policies in the region are governed by the Shasta County 2010 Bicycle Transportation Plan. The Project will not interfere with or impede implementation of this plan. Project implementation would not result in an increase in demand or decline in performance for public transit, bicycle, or pedestrian facilities in the region. There is no impact related to conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The Project would not decrease the performance or safety of such facilities.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a) A Report of Waste Discharge (ROWD) will be submitted to the California Regional Water Quality Control Board prior to any discharge of wastewater. There would be no impact relative to exceedances of the wastewater treatment requirements of the applicable Regional Water Quality Control Board.

b) The Project, including the HMA plant, does not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. No impact will result.

c) Water used for work activities is managed so as to prevent erosion or discharge of pollutants into storm drain systems or watercourses. Approval by the WPC Manager is obtained before washing anything at the job sites with water that could discharge into a storm drain system or watercourse. All job site water runoff, including water from water line repair and water truck filling areas, is directed to areas where it can infiltrate into the ground and not enter storm drain systems or watercourses, thus avoiding or minimizing effects on downstream stormdrain capacities. To the extent possible, water from off-site sources is directed around the job sites, minimizing the contact of off-site water with job site water.

The mandatory runoff management procedures described above and discussed in *Section IX. Hydrology and Water Quality* are implemented through contractor provisions, site inspections, and reporting. Those procedures ensure that no stormdrain capacity impacts will result.

d) Water conservation practices are employed for all water usage at Canyonero 2R Project job sites, including the HMA plant site. Irrigation areas are inspected and water schedules are adjusted to prevent erosion, excess watering, or runoff. Water sources to broken lines, sprinklers or valves are shut off, and breaks are repaired within 24 hours. If possible, water from waterline flushing is reused for landscape irrigation. Paved areas are swept and vacuumed rather than washed with water.

Those mandatory water management procedures are implemented through contractor provisions, site inspections, and reporting. Those procedures ensure that water conservation is maximized and consumptive use is minimized; therefore, no impacts will result.

e) The HMA plant in particular does not require the services of a local wastewater treatment provider. All wastewater will be stored onsite and disposed of periodically by a professional, licensed waste removal company. There is no impact related to any potential determination by the wastewater treatment provider serving the project area that it has inadequate capacity to serve the project.

f) Landfills serving the Project, including the HMA plant site include the West Central Landfill, 30 miles south of the site, and the Anderson Landfill, 35 miles south of the site. The West Central Landfill presently has adequate capacity to continue operating through the year 2019, and the Anderson Landfill has adequate capacity to operate through 2055. Minimal amounts of solid wastes will be generated from the proposed operations as most excess or waste materials

produced by the facility would be recycled. There would no impacts relating to availability of adequate landfill capacity.

g) The Project complies with all federal, state, and local statutes and regulations related to solid waste. Those regulations are embodied in the detailed waste management performance criteria with which the Contractor must comply, as provided in the *Notice To Bidders and Special Provisions*. Criteria were developed and are implemented throughout the Project, including the HMA plant site, for solid waste, hazardous waste, contaminated soil, concrete and HMA waste, sanitary and septic waste, and liquid waste.

Throughout the Project area, litter and debris are not permitted to accumulate at job sites, including storm drain grates, trash racks and ditch lines. Trash and debris are picked up and removed from the job sites at least once a week, and the WPC Manager monitors solid waste storage and disposal procedures. Closed-lid (watertight) dumpsters of sufficient size to contain any solid waste generated by work activities are provided at each site. As determined practicable by the WPC Manager, nonhazardous job site waste and excess material is recycled. If recycling is not practicable, material is disposed in compliance with Caltrans' Standard Specifications.

Hazardous waste provisions were previously described in *Section VIII. Hazards and Hazardous Materials*. As indicated, potentially hazardous waste is separated from nonhazardous waste at the job sites. Hazardous wastes are handled, stored, and disposed of under California Code of Regulations, Title 22, Division 4.5, Section 66262.34; and in CFR Title 49, Parts 261, 262, and 263. All disposal is done using a licensed hazardous waste transporter to take hazardous waste to a Class I Disposal Site.

The mandatory waste management procedures described above and implemented through contractor provisions, site inspections, and reporting ensure that waste generation and disposal will result in no impacts.

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

a) Based on the discussion and findings in Section IV (Biological Resources), there is no evidence to support a finding that the Project would have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or

wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a Rare or endangered plant or animal. Based on the discussion and findings in Section V (Cultural Resources), there is no evidence to support a finding that the Project would have the potential to eliminate important examples of the major periods of California history or prehistory.

b) Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the projects when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

In considering similar highway maintenance and improvement projects that contribute to regional effects (e.g., air emissions, construction traffic delays, etc.), Caltrans 2011 Construction data show highway construction projects in Caltrans District 2. This district encompasses seven counties over an area of 27,815 square miles, and is responsible for maintaining and improving 1,774 centerline miles of highway. To the north, the nearest Caltrans project is (Co-Rte-PM): SIS-005-002.7/R011.4, which is an asphalt removal and replacement project approximately 16 miles north of the Project limits at PM 58.0 and 30 miles north of the HMA plant site. Within five miles of the Canyonero 2R Project, including the HMA plant site and most recent extension of Project limits to PM 44.0, there are only two other Caltrans projects:

- (Lakehead SRRA, Co-Rte-PM: SHA-005-R043.1), which is a facility rehabilitation project about 0.5 mile north of the Lakehead Overcrossing at the Lakehead Safety Roadside Rest Area (about 1 mile south of the HMA plant site).

- (Antlers Bridge Replacement, Co-Rte-PM: SHA-005-R039.5/R040.8), which is a major bridge replacement project near Lakehead from 0.2 mile north of Antler Summit Overcrossing to 0.3 mile north of Antler Underpass (about 3 miles south of the HMA plant site). This project is in its second year of an approximate five-year construction timeline.

Due to their distance from the Project area, those new construction and periodic maintenance projects will have no cumulative bearing on resources in the vicinity of the asphalt overlay Project, including the HMA plant site. Since the HMA plant is located on a disturbed site, project impacts to physical resources on-site have already occurred, are found to be individually less than significant after mitigation, and are not contributing to any known local or regional effects considered cumulatively considerable. This includes the following resources: geology and soils, archaeological and paleontological resources, biological resources, hydrology and drainage modifications, erosion and siltation, aesthetics, and landform alteration.

As a temporary use, the HMA plant has no potential for long-term cumulative effects on community character, land use compatibility, noise, water quality, or air emissions. For all issues except air emissions (including GHG), impacts are limited in geographic extent, either by the localized nature of the environmental resources (e.g., soils) or by the containment and control measures imposed on project activities (e.g., storm water runoff and erosion control). Other site-specific resources were impacted or otherwise modified by previous on-site vegetation removal,

grading and compaction, and thus would not be subject to further impact by the HMA plant, either on an individual or cumulative basis. Moreover, the entire Project, including the HMA plant, is subject to strict environmental controls and monitoring requirements governing a range of resources (i.e., plants, wildlife/habitats, soils, cultural resources, water quality, air quality, etc.). For instance, the National Pollutant Discharge Elimination System, administered by the California Regional Water Quality Control Boards, regulates direct and indirect discharges to surface and ground waters. Due to the requirement to control discharges from construction sites, including storm water discharges, it is reasonable to say that the Project, when combined with past, present and reasonably foreseeable projects, will not result in a cumulatively considerable effect upon water quality. Similarly, since the resource analyses throughout this Checklist demonstrate that the Project is required to implement measures designed to alleviate various cumulative impacts, the Project's contribution is less than cumulatively considerable (Guidelines Section 15130(a)(3)).

With regard to air emissions and greenhouse gases, which are the most widely dispersed individual contributions to a cumulative environmental issue, the SCAQMD (2011a) previously indicated that due to the lack of projects similar in nature, a cumulative emissions analysis of the HMA plant was not appropriate. Checklist item c) in Section III (Air Quality) states,

> *"The project's measured maximum emission rates are expected to produce a cumulative net increase of the pollutants PM-10 and ozone, which are "moderately" non-attainment for Shasta County, according to CARB. . . . However, the ATC/PTO application evaluation (SCAQMD 2011a) concluded the following regarding the cumulative effects of criteria pollutant increases:*
>
> > *A criteria pollutant air quality impact analysis or a cumulative impact analysis is not prudent for this new emissions unit based on the following determinations:*
> >
> > *(a) review of the results of the calculated criteria pollutant emissions will not cause a violation of an ambient air quality standard;*
> >
> > *(b) the assessment of the plant proximity to surrounding receptors (ie: exposure factor based on pollutant emission rate versus distance to nearest receptor); and*
> >
> > *(c) the assessment of the plant proximity of a neighboring industrial facility (ie: exposure factor based on pollutant emission rate versus distance to nearest industry).*
>
> *Although SCAQMD concluded that a cumulative impact analysis is not appropriate for the HMA plant emissions, the agency included permit conditions in the facility's ATC/PTO to ensure that, upon completion of the HMA plant, best available control technology is applied and maintained during all operations of the facility. In accordance with EPA New Source Performance Standards (NSPS), permit conditions were also included for emission limits, reporting requirements, and recordkeeping requirements. . . . No additional operating conditions or mitigation measures are warranted and cumulative net increases of criteria are less than significant.*

Thus, the temporary HMA plant's measured maximum emission rates of the conventional pollutants are expected to produce a cumulative increase in relation to current projects (operating facilities) in the immediate area. However, the cumulative or net increase has been determined to cause a less-than-significant impact after mitigation imposed by the SCAQMD (see Section III. Air Quality). The SCAQMD included permit conditions in the HMA plant's ATC/PTO to ensure that best available control technology was applied upon initial start-up and maintained during all operations of the facility. In accordance with EPA New Source Performance Standards, permit conditions are also included for emission limits, emission monitoring requirements, reporting requirements, and recordkeeping requirements. On-going enforcement of permit conditions by

SCAQMD serves as mitigation measures whereby air pollutant emission impacts will continue to be less-than-significant.

Finally, the Project will provide cumulative environmental benefits. When considering an on-site HMA plant versus an off-site plant, Section VII (Greenhouse Gas Emissions) explained that by locating an HMA plant at the beginning postmile of the Project, vehicle miles traveled (VMT) from more distant HMA sources will be eliminated and air emissions will be avoided as well. The hauling distances from other HMA facilities would vary, yet in all circumstances would exceed the Project VMT. The premise of concurrent VMT and emissions reductions is well documented[10] and any increase in air emissions due to construction will be offset by the improvement in operational emissions.

c) Based on the discussion and findings in all sections above, there is no evidence to support a finding that the project would have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

[10] California Department of Transportation. February 2007. *Construction Aggregate Supply Limitations: Estimates of Economic Impact.*

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Appendix A – Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

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July 20, 2010

TITLE VI
POLICY STATEMENT

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For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Charles Wahnon, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14th Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353 or toll free 1-866-810-6346 (voice), TTY 711, fax (916) 324-1869, or via email: charles_wahnon@dot.ca.gov.

CINDY MCKIM
Director

"Caltrans improves mobility across California"