

# Submission 720 (Dean Borg, California Department of Corrections and Rehabilitation, April 13, 2020)

STATE OF CALIFORNIA — DEPARTMENT OF CORRECTIONS AND REHABILITATION

GAVIN NEWSOM, GOVERNOR

FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT  
P.O. Box 942883  
Sacramento, CA 94283-0001



**Bakersfield - Palmdale - RECORD #720 DETAIL**

**Status :** Action Pending  
**Record Date :** 4/17/2020  
**Response Requested :** Yes  
**Affiliation Type :** State Agency  
**Submission Date :** 4/13/2020  
**Interest As :** State Agency  
**Submission Method :** Project Email  
**First Name :** DEAN  
**Last Name :** BORG  
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**Email Subscription :**  
**Add to Mailing List :**  
**Stakeholder Comments/Issues :**

April 13, 2020

Bakersfield to Palmdale Project Section  
 Draft EIR/EIS Comment  
 770 L Street, Suite 600  
 Sacramento, CA 95814

To Whom It May Concern:

The California High-Speed Rail Authority, as Lead Agency, has published the Bakersfield to Palmdale Project Section Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the California High-Speed Rail Project (HSR Project), under the California Environmental Quality Act and the National Environmental Policy Act.

720-219

As a participating agency of the HSR Project, the California Department of Corrections and Rehabilitation (CDCR) appreciates the opportunity to review and provide comments to the HSR Project DEIR/EIS. As presented, CDCR has no comments regarding the HSR Project DEIR/EIS at this time.

Please contact Peter Connelly, Senior Environmental Planner, at (916) 255-3010, or via email at [Peter.Connelly@cdcr.ca.gov](mailto:Peter.Connelly@cdcr.ca.gov), with any questions.

Sincerely,

DEAN L. BORG  
 Director  
 Facility Planning, Construction and Management

cc: Peter Connelly

SENT ON BEHALF OF  
 DEAN L. BORG, DIRECTOR  
 FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT  
 CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION

Please refer to the attached correspondence referenced above.

Thank you,

Krystal Powell  
 Special Assistant to the Director and Deputy Director  
 Facility Planning, Construction and Management  
 Office: (916) 255-2255  
 Cell: (916) 217-6396

**EIR/EIS Comment :** Yes  
**Attachments :** California High-Speed Rail\_Response to DEIR-EIS\_Bakersfield to Palmdale Section.pdf (178 kb)

## Response to Submission 720 (Dean Borg, California Department of Corrections and Rehabilitation, April 13, 2020)

### 720-219

The commenter acknowledges that the Department of Corrections and Rehabilitation has no comment on the Draft (Environmental Impact Report/Environmental Statement (EIR/EIS) at this time. This comment does not address the technical analysis of the Draft EIR/EIS nor does it suggest edits to the document. No change has been made to the document in response to this comment.

# Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020)

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State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
1234 East Shaw Avenue  
Fresno, California 93710  
(559) 243-4005  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Bakersfield - Palmdale - RECORD #781 DETAIL	
Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
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Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	B-P_DEIR-EIS.pdf (789 kb)
Stakeholder Comments/Issues :	

Mr. McLoughlin:

Please see the attached letter.

If you have any questions, please contact Primavera Parker, Senior Environmental Scientist (Specialist), by e-mail at Primavera.Parker@wildlife.ca.gov<mailto:Primavera.Parker@wildlife.ca.gov>.

Janice Yoshioka  
Staff Services Analyst  
California Department of Fish and Wildlife  
Region 4  
1234 East Shaw Avenue  
Fresno, California 93710

April 28, 2020

Mark McLoughlin  
Director of Environmental Services  
California High-Speed Rail Authority  
770 L Street, Suite 620 MS1  
Sacramento, California 95814

**Subject: California High-Speed Rail Project, Bakersfield to Palmdale Section (Project) Draft Environmental Impact Report/Environmental Impact Study (DEIR/EIS)  
SCH No. 2009082062**

Dear Mr. McLoughlin:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR/EIS from the High-Speed Rail Authority for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup> CDFW previously commented on related environmental documents including:

- Proposed California High-Speed Train System EIR/EIS on August 31, 2004.
- Bay Area to Central Valley Program Draft EIR/EIS on September 25, 2007.
- Bay Area to Central Valley Program Final EIR/EIS on July 7, 2008.
- CDFW Response to the NOP of a Project EIR/EIS for San Jose to Merced High-Speed Train System through Pacheco Pass on April 8, 2009.
- Draft Project EIR/EIS for the Fresno to Bakersfield Section on October 13, 2011.
- Draft Project EIR/EIS for the Merced to Fresno and Section 4(f) Statement on October 13, 2011.
- Revised Draft Environmental Impact Report (DEIR)/Supplemental Draft Environmental Impact Statement (DEIS) and the Biological Resources and Wetlands Technical Report for the Fresno to Bakersfield Section on September 26, 2012.
- Draft Supplemental EIR/EIS for the Fresno to Bakersfield Section on January 16, 2018.
- Draft Supplemental EIR/EIS for the Merced to Fresno Section on June 19, 2019.
- Preferred Alternative for San Jose to Merced on August 22, 2019.
- ADEIR/EIS Cooperating Agency review of the Bakersfield to Palmdale Section on November 18, 2019.

<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

*Conserving California's Wildlife Since 1870*

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Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

### CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

**Water Pollution:** Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures implementation of the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water

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Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

### PROJECT DESCRIPTION SUMMARY

**Proponent:** California High-Speed Rail Authority (Authority)

**Objective:** Bakersfield to Palmdale (B-P) Project Section, which extends approximately 80 miles between High-Speed Rail (HSR) stations in Bakersfield and Palmdale, from the southern San Joaquin Valley and northern Antelope Valley. The project section extends from Kern County in the north to Los Angeles County in the south, with the Bakersfield and Palmdale HSR stations making up this section's beginning and ending points, or the project termini.

The DEIR/EIS for this project section considers four HSR alignment alternatives (Alternatives 1, 2, 3, and 5<sup>2</sup> also known as the "HSR Build Alternatives"), as well as one design option, three station locations, two maintenance facility locations, and the various electrical connections and utility infrastructure needed to support the HSR project. The HSR Build Alternatives under consideration begin at the Bakersfield Station in the City of Bakersfield and end at the Palmdale Station in the City of Palmdale. The Draft EIR/EIS considers one design option (the César E. Chávez National Monument Design Option [CCNM Design Option]), near the Nuestra Señora Reina de La Paz/César E. Chávez National Monument (La Paz) in the community of Keene in Kern County. The HSR Build Alternatives under consideration begin at the Bakersfield Station in the City of Bakersfield and end at the Palmdale Station in the City of Palmdale. The project footprint includes all project components and right-of-way needed to build, operate, and maintain all permanent HSR features. The project footprint primarily consists of the rail right-of-way, which would include a northbound and a southbound track in a corridor ranging from 60 feet wide where the track would be elevated on a viaduct to several hundred feet wide where the track would be on an embankment or in a cut. Additional right-of-way would be required to accommodate associated facilities and improvements, such as maintenance facilities and equipment storage areas, permanent access roads, traction power substations, switching and paralleling stations, train signaling and communication facilities, grade separations (overheads and underpasses), intrusion protection barriers, and wildlife crossing structures. The project footprint also includes areas for utility relocations, roadway relocations, electrical power connections, and construction activities (e.g., laydown, storage, and similar areas).

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**Location:** The proposed Bakersfield to Palmdale Section is located in Kern and Los Angeles counties. The Project northern terminus is located in the City of Bakersfield at the intersection of 34<sup>th</sup> and L streets (latitude 35°23'25.90"N/longitude -119°0'58.97"W). The southern Project terminus is in the City of Palmdale, terminating at Spruce Court, just past the Palmdale Station (latitude 34°33'47.8"N/longitude -118°6'55.4"W).

**Timeframe:** Unspecified.

**COMMENTS AND RECOMMENDATIONS**

CDFW offers the following comments and recommendations to assist the California High-Speed Rail Authority in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

781-576

Currently, the DEIR/EIS indicates that the Project's impacts would be less than significant with the implementation of mitigation measures described in the DEIR/EIS. However, as currently drafted, it is unclear whether the mitigation measures described will be enforceable or sufficient in reducing impacts to a level that is less than significant. CDFW is concerned regarding adequacy of mitigation measures for special-status species including, but not limited to: the State Endangered and federally threatened desert tortoise (*Gopherus agassizii*); the State Threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State Threatened Swainson's hawk (*Buteo swainsonii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), and tricolored blackbird (*Agelaius tricolor*); the State Endangered/State Fully Protected and federally threatened California condor (*Gymnogyps californianus*); the State Threatened/Fully Protected greater sandhill crane (*Grus canadensis tabida*); the State Endangered/Fully Protected and federally endangered blunt-nosed leopard lizard (*Gambelia sila*); the State Fully Protected American Peregrine falcon (*Falco peregrinus anatum*), ringtail (*Bassariscus astutus*), white-tailed kite (*Elanus leucurus*), and golden eagle (*Aquila chrysaetos*); the State Species of Concern and federally threatened California red-legged frog (*Rana draytonii*); the State Species of Concern western spadefoot toad (*Spea hammondi*); and the State Candidate Species for listing mountain lion (*Puma concolor*) (Southern California/Central Coast Evolutionarily Significant Units) and Crotch bumble bee (*Bombus crotchii*); and desert kit fox (*Vulpes macrotis ssp. macrotis*) which is protected under California Code of Regulations (CCR), title 14, chapter 5, section 460.

**I. Mitigation Measure or Alternative and Related Impact Shortcoming**

**Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS)?**

781-577

**COMMENT 1: Fully Protected Raptors**

**Section 3.7.7.4 Impact BIO#11 Direct Impacts on Special-Status Wildlife-Birds and Impact BIO#12 Indirect Impacts on Special-Status Wildlife-Birds pages 75 through 78 and BIO-MM#24 page 127**

The State Fully Protected (SFP) white-tailed kite, golden eagle, American peregrine falcon, greater sandhill crane, and California condor are known to occur within and in the vicinity of the Project footprint (CDFW 2020). The DEIR/EIS acknowledges the presence of suitable habitat for these species within the Project area but does not present measures to minimize the Project's impacts on SFP birds and raptors. Without appropriate mitigation measures, Project activities conducted within occupied territories have the potential to significantly impact these species.

The Project will remove known and potential nesting trees, foraging habitat, and wetlands used extensively by these species. The Project will involve noise, groundwork, and use of heavy machinery that may occur directly adjacent to large trees with potential to serve as nest trees for SFP raptors. In addition, electrical components of the train system (e.g., the overhead quaternary system, upgraded power distribution poles, etc.) have the potential to result in electrocution and strike hazards. In addition, condor hazing as an avoidance/minimization measure to prevent habituation and scavenging has been suggested for use as a mitigation measure in the DEIR/EIS which could potentially constitute take as defined under Fish and Game Code section 86.

Because the DEIR/EIS identifies the potential for SFP birds and raptors to occur in the Project area, CDFW recommends updating the DEIR/EIS to include the following measures, and that these measures be made Conditions of Approval for the Project. CDFW recommends quantitative and enforceable measures that will reduce the impacts to less than significant levels.

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project or the vicinity (within ½-miles) contains suitable habitat for SFP birds and raptors.

If suitable habitat is present, CDFW recommends that focused surveys be conducted by qualified biologists at individual Project work areas prior to Project implementation. To avoid impacts to these species, CDFW recommends conducting these surveys in accordance with protocols developed by CDFW (CDFG 2010) and the USFWS (USFWS 2010). If Project activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-construction surveys for active nests and habitat use be conducted by a qualified biologist no more than 10 days prior to the start of construction.

In the event that special-status bird and/or raptor species are found within ½ mile of Project sites, implementation of avoidance measures is warranted. CDFW

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recommends that a qualified wildlife biologist be on site during all ground-disturbing/ construction-related activities and that a ½-mile no-disturbance buffer be put into effect. If the ½-mile no-disturbance buffer cannot feasibly be implemented, contacting CDFW to assist with providing and implementing additional avoidance measures is recommended. Completely addressing mitigation measures for SFP bird and raptor species in the DEIR/EIS for the Project is recommended.

To reduce the impact to special-status birds and raptors from electrical power lines and poles and the quaternary system, spacing between conductors is advised to be far enough apart so they cannot be bridged by a bird's wingspan, designing poles to exclude closely spaced energized parts can be hazardous or fatal to birds, and including perch guards to deter birds from landing or resting on poles.

To prevent nest abandonment and behavioral disturbance, CDFW recommends that consultation will occur prior to construction-related uses of helicopters. CDFW also recommends implementation of avoidance of nighttime construction activities and that all permanent lighting necessary for the long-term operation of the train be designed and installed such that it does not spill out from the rail footprint and cause light pollution.

Lastly, it is advised that a measure be incorporated into the DEIR/EIS that dead and injured wildlife found in the right-of-way will be removed during construction and during ongoing operations when it is safe to do so to prevent the threat of bird strikes should eagles and condors try to forage in the right-of-way during operational periods.

781-578

**COMMENT 2: Swainson's Hawk (SWHA)**

**Section 3.7.8 Biological Resources and Wetlands; Mitigation Measures BIO-MM#26-28; pages 128 through 129 and BIO-MM#50 page 138.**

SWHA have the potential to nest within and in the vicinity of the Project. SWHA are also regularly observed foraging throughout the Palmdale and Lancaster area.

In addition, as described in the DEIR/EIS, foraging habitat for SWHA exists within and in the vicinity of the Project area. The Project area is surrounded by annual grasslands and croplands that may be used for foraging. The California Natural Diversity Database (CNDDDB) shows SWHA occurrences in Kern and Los Angeles counties (CDFW 2020). CDFW acknowledges that BIO-MM#26 requires a pre-activity survey for suitable SWHA nesting habitat. This measure also requires a no-disturbance buffer in consultation with CDFW should an active nest be found. However, the DEIR/EIS should define the restrictive buffer size, in BIO-MM#27, or provide provisions for consulting with CDFW on whether take avoidance can occur should implementation of the buffer not be feasible. These measures do not indicate what the no-work buffer for active nests will be but rather defers this mitigation measure to the Project Biologist to establish the no-work buffer following consultation. If SWHA are detected and the ½-mile no-disturbance nest

781-578

buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, CDFW recommends acquisition of an Incidental Take Permit (ITP).

781-579

BIO-MM#28 indicates that there will be no compensation for the removal of known nesting trees outside of the nesting season. For these reasons, as currently drafted, the provisions described in this measure may not be enforceable or adequate in minimizing impacts to SWHA to a level that is less than significant.

SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley and the Mojave Desert limits their local distribution and abundance (CDFW 2016). The Project as proposed will involve noise, groundwork, use of heavy machinery, and high levels of human activity from construction workers that could affect nests and has the potential to result in nest abandonment, significantly impacting nesting SWHA in the Project vicinity. The mature trees and agricultural fields in the Project footprint and vicinity provide suitable nesting and foraging habitat. CDFW considers removal of known bird-of-prey nest trees, even outside of the nesting season, a potentially significant impact under CEQA, and in the case of SWHA, it could also result in take under CESA. CDFW considers a SWHA nest site to be active if it was used at least once within the past five years and impacts to suitable habitat or individual birds within a 5-mile radius of an active nest as significant. Based on the foregoing, Project impacts would potentially substantially reduce the number and/or restrict the range of SWHA or contribute to the abandonment of an active nest and/or the loss of significant foraging habitat for a given nest territory and thus result in "take" as defined under CESA.

781-580

Because suitable habitat for SWHA is present throughout the Project area, CDFW recommends revising the DEIR/EIS to include the following measures and that these measures be made Conditions of Approval for the Project.

CDFW recommends that a qualified biologist conduct a habitat assessment of individual Project areas in advance of Project implementation, to determine if the Project area, or in the Project vicinity, contain suitable habitat for SWHA. If suitable habitat is present, in order to evaluate potential impacts, CDFW recommends that a qualified biologist conduct surveys for nesting SWHA following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000) prior to Project implementation for Project activities occurring in the City of Bakersfield and its outlining areas. CDFW released guidance for this species entitled *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* (2010). CDFW recommends conducting focused surveys for SWHA following these two survey methodologies guidelines.

The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying

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active nest sites prior to initiating Project activities. If Project activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

If an active SWHA nest is found, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If SWHA are detected and the ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization through acquisition of an ITP, pursuant to Fish and Game Code section 2081(b) is necessary to comply with CESA.

As stated above, SWHA exhibit high nest-site fidelity year after year and CDFW considers removal of known SWHA nest trees, even outside of the nesting season, a potentially significant impact under CEQA. Non-native trees are used by SWHA for nesting therefore the value for compensation of a non-native nesting tree is the same as a native nesting tree species. Regardless of nesting status or tree species, if potential or known SWHA nest trees are removed, CDFW recommends they be replaced with an appropriate native tree species, planted at a ratio of 3:1, in an area that will be protected in perpetuity, to reduce impacts to SWHA from the loss of nesting habitat.

If SWHA nests occur in or adjacent to the Project area, CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's Staff Report Regarding Mitigation for Impacts to SWHA (DFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of one acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of 0.75 acres of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of 0.5 acres of HM land for each acre of development is advised.

781-581

**COMMENT 3: Tricolored Blackbird (TRBL)**

**Section 3.7.7.4 Impact BIO#11 Direct impact on Special-Status Wildlife-Birds and Impact BIO#12 Indirect impact on Special-Status Wildlife-Birds pages 75 through**

781-581

**77 and Section 3.7.7.2 BIO-MM#69: Conduct Surveys and Implement Avoidance Measures for Active Tricolored Blackbird Nest Colonies Page 137**

The DEIR/EIS acknowledges that TRBL have the potential to occur within or near the Project (CDFW 2020). The Project footprint in southern Kern County contains annual grasslands, dairies, pastures, wetlands, and field crops.

MM#69 proposes that to the extent practicable, a 300-foot no disturbance buffer will be implemented around nesting TRBL colonies. However, MM#69 goes on to state that the 300-foot buffer could be reduced if needed to meet construction goals. Reduction may be reduced in areas of dense forest, buildings, or other habitat features between the construction activities and the active nest colony or where there is sufficient topographic relief to protect the colony. The measure also proposes that if a colony is established after the initiation of construction the Authority will establish buffers or sound curtains as determined by the Project Biologist. CDFW advises that such an activity has a high likelihood to result in take.

781-582

TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields (Kelsey 2008). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014).

Because the DEIR/EIS identifies the potential for TRBL to occur within Project, CDFW recommends conducting the following evaluation of the Project, updating the DEIR/EIS to include the following measures, and that these measures be made Conditions of Approval for the Project.

CDFW recommends that a qualified biologist conduct a habitat assessment of individual Project areas in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for TRBL. It is advised that Project activities be timed to avoid the typical bird breeding season (February 1 through September 15). However, if Project activities must take place during that time, CDFW recommends that a qualified biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of ground- or vegetation disturbance to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

If an active TRBL nesting colony is found during pre-construction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015b).

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781-582 | CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. Further, TRBL colonies can expand over time and for this reason, the colony may need to be reassessed on a reoccurring basis to determine the extent of the breeding colony within 10 days of Project initiation.

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081(b), prior to any ground-disturbing activities.

781-583 | **COMMENT 4: Section 3.7.6.4 Impact BIO#2: Construction Impacts on Special-Status Wildlife Species-Reptiles Page 59 and Section 3.7.7.2 –BIO-MM#13 Implement Avoidance Measures for Blunt-Nosed Leopard Lizard Page 110**

The DEIR/EIS states, "Mortality, injury, or harassment may also occur if these species become trapped in open, excavated areas. The Authority understands that the blunt-nosed leopard lizard is fully protected and the project would be designed to avoid take if potential direct impacts on this species are identified." CDFW recommends that the DEIR/EIS clearly articulate the avoidance and measures to be implemented so that no take of this SFP species would occur from construction and operation.

This DEIR/EIS also states, "If ground disturbing activities are scheduled during the non-active season, suitable burrows identified during the surveys will be avoided through establishment of 50-foot no work buffers. The Project Biologist may reduce the size of the no-work buffers if information indicates that the extent of the underground portion of burrows is less than 50 feet." Reduction of the 50-foot no-work buffer increases the risk of take of a SFP species.

CDFW recommends that the Lead Agency not overlook that CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species, including but not limited to BNLL, is prohibited and CDFW cannot authorize their take for any reason. Therefore, it would be prudent to develop a well thought out approach to maintaining avoidance of this species.

Prior to initiating vegetation- or ground-disturbing activities in areas with potentially suitable BNLL habitat, CDFW recommends conducting surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019b). This recommended survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground-disturbance will not result in take of this fully protected species if such surveys do not detect any individuals within or adjacent to the Project footprint.

781-583 | CDFW advises completion of BNLL surveys no more than one year prior to initiation of ground disturbance. Please note that protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall and that within these time periods there are specific protocol-level date, temperature, and time parameters which must be adhered to. As a result, protocol-level surveys for BNLL are not synonymous with 30-day "pre-construction surveys" often recommended for other wildlife species. Also, the use of conservation dogs for BNLL scat detection would not be appropriate for project-level surveys if used as a stand-alone survey effort to determine negative findings for the species.

BNLL detection during protocol level surveys or other means warrants consultation with CDFW to discuss how to implement Project activities and avoid take.

781-584 | **COMMENT 5: Desert Tortoise (DETO) Section 3.7.6.5 Impact BIO#8- Operational Impacts on Special-Status Wildlife Species- Amphibians, Reptiles, and Insects Page 81 Section 3.7.7.2 BIO-MM#79 Mitigation for Desert Tortoise Pages 140-142**

DETO are most common in desert scrub, desert wash, and Joshua tree habitats (CDFW 2018a). Because of the Project location, habitat, and limited area of coverage in the proposed Project footprint that protocol-level surveys were conducted, DETO may have the potential to be impacted by Project activities throughout the Project footprint.

Human impacts to DETO include habitat conversion to agriculture and urban lands, degradation of habitat by off-highway vehicles (OHV), intentional killing of tortoises, and killing by cars and OHV (Doak et al. 1994). The loss of habitat may lead to an increase in the predator raven population, drawdown of water table, introduction of pesticides and other toxic chemicals, and the potential introduction of invasive plants (Boarman 2002). Project activities may result in the loss of potential desert tortoise habitat through conversion, may increase habitat fragmentation, provide raven perches atop access-controlled fence allowing for easier predation of fence stranded DETO, and expand urbanization into the area.

To evaluate potential Project-related impacts to DETO, CDFW recommends that a qualified biologist conduct surveys during the appropriate survey period following the protocol contained in "Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*)" (USFWS 2010) to determine the potential for DETO to use the Project site and surrounding area. Survey results are advised to be submitted to both CDFW and the USFWS. Please note DETO surveys are valid for one year and should be conducted within a year of the start of ground-disturbing activities.

If DETO are found within the Project during pre-construction surveys or construction activities, consultation with CDFW is advised to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to acquire an ITP prior to any



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781-584 ground-disturbing activities, pursuant Fish and Game Code section 2081(b). Alternatively, the applicant can assume presence and acquire an ITP prior to initiating Project implementation as proposed in Mitigation Measure 16.

781-585 **COMMENT 6: Section 3.7.6.4 Construction Impacts-Biological Resources (San Joaquin kit fox) Impacts Common to All Bakersfield to Palmdale Project Section Build Alternatives Pages 48 and Section 3.7.7.2 -BIO-MM#45: Compensatory Mitigation for Impacts on San Joaquin Kit Fox Habitat Page 122**

This section states, "Urban and agricultural lands affected by construction-period activities are not expected to: (1) provide conditions that support special-status plant species or special-status plant communities; (2) provide preferred habitat for special-status wildlife species; (3) support high-quality aquatic resources; or (4) facilitate the movement or migration of wildlife species." It should be noted that urban areas such as the City of Bakersfield are occupied by localized high densities of San Joaquin kit fox. As a result, construction-period activities in these areas would have impacts to this species. Other species such as burrowing owl are also present in some urban environments.

The DEIR/EIS proposes habitat will be replaced at a minimum of 1:1 for natural lands and at a ratio of 0.1:1 for suitable urban or agricultural lands, unless a high ratio is required by regulatory authorizations issued under the FESA and/or CESA. As stated above, the San Joaquin kit fox (SJKF) population in Bakersfield uses urban habitat and is a unique and important source population that provides gene flow and diversity to the SJKF population in the surrounding areas. Therefore, CDFW recommends mitigation for the loss of all SJKF habitat, including that in the urban environment.

781-586 **COMMENT 7: Mohave Ground Squirrel (MGS)**

**Section 3.7.6.4 Impact BIO#8: Construction Impacts on Special-Status Wildlife Species Page 81**

There are MGS occurrences within and adjacent to the Project footprint (CDFW 2020). The CNDDDB is limited to locations where surveyors have had access and occurrences have been reported and does not include the entirety of where a species may occur. MGS are known to spend seven months of the year (August through February) in underground burrows in estivation (Gustafson 1993).

Potential habitat for MGS is land supporting desert shrub vegetation within or adjacent to the geographic range of the species (CDFG 2003). The level of survey effort detailed in the Biological Resource Technical Report is indicative of a reconnaissance-level survey and was limited in scope to narrow areas of the Project footprint where access was granted. Based on the information presented, CDFW recommends the probability of occurrence should be identified as at least "moderate". In addition, based on review of version 2 of the species model, additional area should be included as "suitable" within the urbanized area near Lancaster and Palmdale to capture movement and dispersal

781-586 behavior (including undeveloped land located immediately adjacent modeled suitable habitat). Recent CNDDDB occurrences do not appear to have a suitable category assigned even though the area is undeveloped and, in some cases, connected to areas with suitability categories. CDFW recommends broadening areas for inclusion as suitable habitat.

Major threats to the MGS are drought, habitat destruction, habitat fragmentation, and habitat degradation (Gustafson 1993). MGS is restricted to a small geographic range (Gustafson 1993). Natural cycling is anticipated in MGS populations, therefore, the true indicators of the status of the species are the quantity, pattern of distribution, and quality of habitat (Gustafson 1993). Project activities will result in the loss of potential MGS habitat through implementation of the Project, will increase habitat fragmentation, and may expand urbanization into the area.

To evaluate potential Project-related impacts to MGS, CDFW recommends conducting the following evaluation of the Project and including the following measures in the DEIR/EIS.

CDFW advises that a qualified permitted biologist conduct protocol surveys for MGS following the methods described in the "Mohave Ground Squirrel Survey Guidelines" (CDFG 2003) during the appropriate survey season prior to Project implementation, including any vegetation- or ground-disturbing activities. Please note that guidelines indicate that a visual survey and up to three trapping sessions may need to be conducted (CDFG 2003). Results of the MGS surveys are advised to be submitted to CDFW. Please note MGS surveys are valid for one year and should be conducted within a year of the start of ground- or vegetation-disturbing activities.

If protocol surveys will not be conducted or if surveys detect MGS, in order to implement full avoidance for MGS, CDFW recommends a 50-foot no-disturbance buffer be employed around all burrows that could be used by MGS.

If MGS are found within the Project site during protocol surveys, pre-construction surveys, or construction activities, consultation with CDFW is recommended to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to acquire an ITP prior to any ground-disturbing activities, pursuant to Fish and Game Code section 2081(b). Alternatively, the applicant can assume presence and acquire an ITP prior to initiating Project implementation as proposed.

**COMMENT 8: California Red-Legged Frog (CRLF)**

**Section 3.7.6.4 Impact BIO#2: Construction Impacts on Special-Status Wildlife Species-Amphibians Page 59 and Section 3.7.6.5 Impact BIO#8- Operational Impacts on Special-Status Wildlife Species- Amphibians, Reptiles, and Insects Page 81 and Section 3.7.7.2 BIO-MM# 7: Conduct Pre-construction Surveys for Special-status Reptile and Amphibian Species and BIO-MM#8: Implement**

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**Avoidance and Minimization Measures for Reptile and Amphibian Species  
Pages 109-110**

CRLF are known to occur within and in the vicinity of the Project area (CDFW 2020). CRLF require a variety of habitats including aquatic breeding habitats and upland dispersal habitats. Breeding sites of the CRLF are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Additionally, CRLF frequently breed in artificial impoundments such as stock ponds (USFWS 2002). Breeding sites are generally found in deep, still or slow-moving water (greater than 2.5 feet) and can have a wide range of edge and emergent cover amounts. CRLF can breed at sites with dense shrubby riparian or emergent vegetation, such as cattails or overhanging willows, or can proliferate in ponds devoid of emergent vegetation and any apparent vegetative cover (i.e., stock ponds). CRLF habitat includes nearly any area within one to two miles of a breeding site that stays moist and cool through the summer; this includes non-breeding aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and upland sheltering habitat such as rocks, small mammal burrows, logs, densely vegetated areas, and even man-made structures (i.e., culverts, livestock troughs, spring-boxes, and abandoned sheds) (USFWS 2017c). Review of aerial imagery indicates that within and in the vicinity of the Project could serve as habitat to CRLF. The DEIR/EIS does not acknowledge the potential for CRLF to occur in the Project area and the potential for impacts.

CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, mining, overgrazing by cattle, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to CRLF (Thomson et al. 2016, USFWS 2017c). Therefore, project activities have the potential to significantly impact CRLF.

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if Project or immediate vicinities contain suitable habitat for CRLF. If suitable habitat is present, CDFW recommends that a qualified biologist conduct surveys for CRLF within 48 hours prior to commencing work (i.e., two night surveys immediately prior to construction or as otherwise required by the USFWS) in accordance with the "Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog" (USFWS, 2005) to determine if CRLF are within or adjacent to the Project.

If any CRLF are found during pre-construction surveys or at any time during construction, CDFW recommends that construction cease and that CDFW be contacted to discuss a relocation plan for CRLF by a qualified biologist.

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CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 and March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist conduct construction activity monitoring daily for CRLF.

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**Comment 9: Western Pond Turtle**

Western pond turtle (*Emys marmorata pallida*) has the potential to occur adjacent to within and adjacent to several areas of the Project site. CDFW recommends a Mitigation Measure be incorporated into the DEIR/EIS to require protection for western pond turtle during their breeding season and require a no-disturbance buffer of 475 feet from the outside edge of wetland habitat suitable for the species within the Project site to protect nesting areas. CDFW is recommending a 475-foot buffer since female pond turtles can move overland for up to 325 feet to find suitable sites for egg-laying. In addition to avoiding a minimum of 325 feet from the edge of a water feature, CDFW recommends an additional 150 foot beyond the 325-foot overland travel range to protect nests and nesting sites from direct and indirect Project disturbance. CDFW also recommends focused surveys for western pond turtles be conducted in all areas of the Project site that provide potential habitat for western pond turtle and survey results be incorporate into a revised DEIR/EIR to allow CDFW to make specific recommendations and comments on additional mitigation measures proposed to minimize impacts to this species.

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**Comment 10: Western Spadefoot toad**

Western spadefoot toad aestivate underground in upland habitat and emerge during heavy rainfall events in order to migrate to nearby water bodies (including those that are ephemeral in nature) to breed. Western spadefoot toad may occur within and adjacent to the Project footprint. If potential breeding sites for western spadefoot toad are identified in the Project site during pre-construction surveys, CDFW recommends the consultation with CDFW prior to the implementation of the Project to develop a plan to avoid impacts to western spadefoot toad.

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**COMMENT 11: Crotch Bumble Bee (CBB)**

**Section 3.7.7.2 BIO-MM#80 Conduct Surveys and Implement Avoidance Measures for Crotch Bumble Bee and BIO-MM#81 Provide Compensatory Mitigation for Impacts on Crotch Bumble Bee Pages 142-143**

On June 28, 2019, the Fish and Game Commission published findings of its decision to advance CBB to candidacy as endangered. Pursuant to Fish and Game Code section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of CBB, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines, section 15380, the status of the CBB as an endangered candidate species under CESA (Fish & G. Code, § 2050 et

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seq.) qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to import into California, export out of California or take, possess, purchase, or sell within California, CBB and any part or product thereof, or attempt any of those acts, except as authorized pursuant to CESA. Under Fish and Game Code section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of CBB during the status review period is prohibited unless authorization pursuant to CESA is obtained.

CBB have been documented to occur within the vicinity of the Project area (CDFW 2020). Suitable CBB habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. CBB primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, under brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2015). Overwintering sites utilized by CBB mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Therefore, ground disturbance and vegetation removal associated with Project implementation has the potential to significantly impact local CBB populations.

The Authority proposes using general guidelines and best practices for bumblebee surveys would follow USFWS' "Survey Protocols for the Rusty Patched Bumble Bee (*Bombus affinis*)" (USFWS 2019). MM#80 indicate using non-lethal netting method to capture CBB. Netting is a form of capture which is a form of take under CESA; therefore, an ITP, pursuant to Fish and Game Code section 2081(b), is required for conducting surveys under this method.

CBB was once common throughout most of the central and southern California; however, it now appears to be absent from most of it, especially in the central portion of its historic range within California's Central Valley (Hatfield et al. 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years.

To evaluate potential impacts to CBB associated with the Project, CDFW recommends implementing the following mitigation measure as a condition of approval for the Project.

CDFW advises that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

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## Comment 12: Joshua and Oak Tree Woodland Habitat

### Section 3.7.6.4 Impact BIO#3: Construction Impacts on Special-Status Plant Communities Pages 65-66 and BIO-MM#1 page 107 and Section 3.7.7.2 BIO-MM# 6 Pages 108-109

The Project will remove approximately 268.2 to 300.3 acres of Joshua tree (*Yucca brevifolia*) habitat and an unknown number of acres of oak (*Quercus spp.*) woodland habitat resulting in a net loss of two valuable habitat types. Joshua tree woodland is considered a California Native Plant Society 3 listed rare vegetation community that has limited distribution in California. Project implementation would result in a substantial adverse effect, either directly or through habitat modifications, on a rare vegetation community identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS. CDFW advises that throughout the Project footprint, the Joshua tree and oak woodland habitat appears to be of good functional quality displaying a high percentage of recruitment (juvenile trees). This is significant given the recent drought experienced in the region.

The DEIR/EIS lacks analysis and mitigation for the temporal loss off Joshua tree and oak woodland habitat. BIO-MM# 1 does not include a specific and enforceable avoidance buffer for Joshua trees. CDFW notes that the DEIR/EIS does not discuss or propose compensatory mitigation to offset the loss of either habitat type in the implementation of the Project. Therefore, it is unclear how Project impacts would be reduced to less than significant without specific and enforceable avoidance, minimization, or mitigation measures identified in the DEIR/EIS.

CDFW recommends the DEIR/EIS identify, map, and discuss the specific vegetation communities and habitat communities within the Project Area following CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (Survey Protocols) see: (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>). Please note, this protocol was updated, and the 2018 version referenced here should be used. In order to determine the rarity ranking of vegetation communities potentially affected by the Project, the Manual of California Vegetation (MCV) alliance/association community names should be provided as CDFW tracks rare natural communities using this classification system.

CDFW considers natural communities such as Joshua tree woodlands with ranks of S1-S3 to be sensitive natural communities that should be addressed in CEQA (CEQA Guidelines, § 15125[c]). An S3 ranking indicates there are 21-80 occurrences of this community in existence in California, S2 has 6-20 occurrences and S1 has less than 6 occurrences. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project. If avoidance is not feasible, CDFW recommends mitigating at a ratio of no less than 5:1 for impacts to S3 ranked communities and 7:1 for

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S2 communities. This ratio is for the acreage and the individual plants that comprise each unique community.

CDFW recommends the DEIR/EIS be revised to reflect a 4-inch diameter at breast height when considering which oak trees, and trees in general, require mitigation. More importantly, the oak woodland community needs to be considered in its entirety when considering mitigation to replicate the habitat function. Oak trees are a dense, slow growing hardwood requiring decades to mature. CDFW recommends revising the mitigation measures to require monitoring oak trees/oak woodlands for a minimum of 15 years and up to 20 years to determine success. To reestablish the oak woodlands, CDFW recommends three planting seasons. The first planting season, year 0, being the acorn and sun tolerate ground covers; the second planting season occurring at approximately year 5, introducing sun/shade tolerate species; and the third planting season at year 10 with the introduction of more shade tolerate understory species. To determine the appropriate species and density of the oak woodlands, three representative oak woodland sites need to be analyzed for species composition, density, and richness. The created sites, once established, need to reflect the representative sites.

These Joshua tree and oak woodland mitigation areas should be protected against anthropogenic impacts for the life of the project. CDFW recommends mitigation lands be preserved and managed in perpetuity under a conservation easement (CE) and managed by a local land conservancy. The proposed specific mitigation location should be identified in the CEQA document in order to ensure that mitigation is not deferred until some future time; however, the DEIR/EIS document "may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (CEQA Guidelines, § 15126.4(a)(1)(B)).

This section should also discuss any oak tree regulations that would apply to the project (see section S.4.2.5 [Plant Communities] discussion) as well.

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## COMMENT 13: Special-Status plants

**Section 3.7.6.4 Fresno to Bakersfield Locally Generated Alternative Area-Oswell Street to the Palmdale Station- Impact BIO# 1 Construction Impacts on Special-Status Plant Species Pages 50 and Section 3.7.7.2 BIO-MM#1 Conduct Presence/Absence Pre-construction Surveys for Special-Status Plant Species and Special-Status Plant Communities and BIO-MM#2 Prepare and Implement Plan for Salvage and Relocation of Special-Status Plant Species Pages 107-108**

Several special-status plant species have been documented to occur in the vicinity of the Project area (CDFW 2020). As stated in the DEIR/EIS, the Project area contains habitat suitable to support numerous special-status plant species meeting the definition of rare or endangered under CEQA Section 15380 including Alkali mariposa lily (*Calochortus striatus*), Mojave spineflower (*Chorizanthe spinosa*), Rosamond eriastrum

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(*Eriastrum rosamondense*), Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), Lancaster milk-vetch (*Astragalus preussii* var. *laxiflorus*), Parry's spineflower (*Chorizanthe parryi*), and California goldfields (*Lasthenia californica*).

CDFW finds the CNDDDB mapping used for special-status plant communities was outdated (ca. 2016) and aerial imagery used as supporting data for the lack of native plant habitat occurrence in the Supplemental Study Area were from years 2009 and 2014, both of which were drought years of historic significance. As such, the aerial imagery of the Project area is not robust in depicting native plant communities within the Project footprint and cannot be used to model or infer presence/absence of the special-status plant communities. CDFW recommends this mapping be updated with current data and provide a range of mapping and imagery that captures both wet and dry year vegetation community occurrences.

The DEIR/EIS also indicates that botanical surveys for the Project alignment in Los Angeles County were last conducted in 2015 within limited areas. CDFW recommends updated surveys be conducted for the Los Angeles County segment during the appropriate conditions to provide a more current assessment and to verify the results of the prior 2015 work (see section 5.4.2.5 Plant Communities). Section 6.2 acknowledges that access for significant portions of the Project footprint were not available; therefore, CDFW recommends mapping areas to show where field work was conducted versus areas which were analyzed through non-field work methods.

Although BIO MM#1 of the DEIR/EIS requires a pre-activity survey and a buffer around special-status plants, it does not specify the protocol to be used or the extent of the no-disturbance buffer to be implemented if a State-listed plant species is detected and cannot be avoided. Mitigation Measure MM#2 also states that the mitigation plan has the potential to include plant relocation or seed collection, both of which would be considered take, pursuant to Fish and Game Code Section 86. Absent acquisition of an ITP in accordance with Fish and Game Code section 2081(b), take of State-listed plants would be a violation of the Native Plant Protection Act. Therefore, the measures in the DEIR/EIS may not be adequate to reduce impacts to a level that is less than significant and may themselves result in take.

CDFW recommends that a qualified botanist conduct a habitat assessment in advance of project implementation to determine if the Project or the immediate vicinity contain suitable habitat for special-status plant species. If suitable habitat is present, CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

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781-592 | CDFW recommends that special-status plant species be avoided whenever possible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

If a plant species listed pursuant to CESA or the Native Plant Protection Act is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization prior to any ground-disturbing activities may be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code Section 2081(b).

Please note, mitigation ratios, and/or other measures for CESA-listed plant species will need to meet the full mitigation requirement pursuant to section 2081(b)(2) of Fish and Game Code, the details of which will be determined through the ITP process.

781-593 | **COMMENT 14: Desert Kit Fox**

The proposed Project is within desert kit fox (*Vulpes macrotis arsipus*) range and contains suitable habitat for the species. The desert kit fox is protected under Title 14, California Code of Regulations, section 460, which prohibits take of the species at any time. CDFW recommends that the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011) be followed and that surveys be conducted accordingly and prior to commencing any Project-related activities. If any active or potential dens are found on the Project site during these surveys, consultation with CDFW would be warranted for guidance on take avoidance measures for the desert kit fox.

781-594 | **COMMENT 15: Mountain Lion**

It should be noted that on June 25, 2019, a petition to list the mountain lion (*Puma concolor*), Southern California/Central Coast Evolutionarily Significant Unit (ESU) in Southern and Central California as Threatened or Endangered pursuant to CESA (Fish & G. Code §§ 2050 et seq.) was submitted to the California Fish and Game Commission. Specifically, the petitioners requested listing as a "threatened species" for the ESU comprised of the following recognized mountain lion subpopulations: 1) Santa Ana Mountains; 2) Eastern Peninsular Range; 3) San Gabriel/San Bernardino Mountains; 4) Central Coast South (Santa Monica Mountains); 5) Central Coast North (Santa Cruz Mountains); and 6) Central Coast Central. On April 16, 2020 the Fish and Game Commission determined that the petitioned action "may be warranted" and established mountain lion within the proposed ESU as a candidate species under CESA. As a candidate species, mountain lion within the proposed ESU now has all the protections afforded to an endangered species under CESA.

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CDFW advises including and referencing recent linkage studies on mountain lion that includes these six subpopulations of mountain lions in California. The Project alignment transects the Southern California ESU and two of the genetically distinct mountain lion subpopulations (San Gabriel/San Bernardino and Eastern Peninsular Range). Therefore, CDFW advises analyzing Project impacts to the subpopulations, including issues with connectivity and fragmentation of habitat. Based on this analysis, CDFW recommends the DEIR/EIS be revised to include robust feasible avoidance, minimization, and mitigation measures to reduce impacts to mountain lion to less than significant.

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**COMMENT 16: Section 3.7.6.5 Impact BIO#8- Operational Impacts on Special-Status Wildlife Species- CEQA Conclusion Page 82-83**

This section states that effective mitigation would include the relocation of special-status wildlife species within the project footprint. This activity is considered take in the form of capture or the attempt to capture the species (as defined under Fish and Game Code Section 86) and warrants the acquisition an ITP from CDFW for any species that is State-listed candidate, threatened, or endangered. Take of any SFP protected species is prohibited, and CDFW cannot authorize their take for any Project-related reason.

781-596

**COMMENT 17: Section 3.7.6.5 Impact BIO#13- Potential Conflicts with Conservation Plans and Easements Page 89**

This section lacks analysis of indirect impacts to conservation plans and conservation easements (CE). The alignment will go through the White Wolf CE and Tejon CE lands purchased for conservation of California condor and other special-status species by the State of California. The impacts to the values set forth in CEs were not evaluated and analyzed. CDFW recommends this be analyzed and included in the DEIR/EIS, including the legal mechanism that the Authority would utilize to condemn or otherwise impact lands permanently conserved by the State of California. As indicated previously during early consultation, CDFW recommends that an alternative location for that portion of the Project alignment be identified to avoid impacts to permanently conserved lands and the associated legal implications.

781-597

**COMMENT 18: Section 3.7.7 Mitigation Measures Page 90-91**

This section states: "The goal of the habitat mitigation is to ensure the future conservation of affected resources on a regional scale such that the benefits to the affected resources offset the impacts of the narrow, linear project, which would affect a relatively small percentage of the important resources in the region. In some cases, and in consultation with the USFWS and CDFW, the compensatory mitigation may be weighted in favor of resources for which conservation is a higher priority than for more common resources or resources that would experience lesser impacts." It should be noted that the Project is not simply a narrow linear project. The project spans between two counties (Kern and Los Angeles) for 80 miles (linearly), which does not account for

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total project acres with important biological and aquatic resources. In June 2017, CDFW Region 5 provided the Authority with information on potential conservation areas within Los Angeles County (focused on the B-P section) based on five criteria as follows: 1) Existing land use conservation designations; 2) Nine species likely to occur within the B-P project area based on known occurrences and high suitability; 3) Locations within identified regional wildlife corridors and linkages; 4) Presence of wetlands; and 5) Location adjacent to public-owned lands and public-owned preserve lands. CDFW is able provide information on areas that are potentially suitable for general conservation purposes (considering the species included in the B-P Biological Resources Technical Report [BARTR]); however, whether or not these areas will satisfy project-related mitigation requirements for State permitting will require further review and information. In the case of the B-P segment, mitigation for impacts in CDFW Region 4 (Kern County) or CDFW Region 5 (Los Angeles County) should occur in those respective CDFW Regions.

The DEIR/EIS also describes the proposed mitigation ratios for special-status species and habitats impacted by the Project. CDFW does not agree that all of the proposed mitigation and associated mitigation ratios proposed will be sufficient to reduce impacts to all special-status species and habitats to less than significant levels. Please note that mitigation ratios, and/or other measures for CESA-listed species will need to meet the full mitigation requirement pursuant to Section 2081(b)(2) of Fish and Game Code, the details of which will be determined through the ITP process.

781-598

**COMMENT 19: Section 3.7.7.2 BIO-MM#22 Conduct Pre-Construction Surveys for Nelson's Antelope Squirrel and Tipton Kangaroo Rat Pages 1114-115**

CDFW recommends that protocol-level surveys should be conducted prior to any ground-disturbing activities. It should also be noted that both trapping and relocation (handling) of State-listed species to remove them from harm's way or out of the Project footprint prior to ground-disturbing activities warrants the acquisition of an ITP pursuant to Fish and Game Code section 2081(b).

781-599

**COMMENT 20: Section 3.7.7.2 BIO-MM#25 Conduct Pre-Construction Surveys for Special-Status Bats**

To minimize potential Project-related impacts to bat species, CDFW recommends the Authority conduct pre-construction surveys to establish areas of occupancy the year prior to the start of construction in each construction area and that surveys be conducted by a minimum of two CDFW-qualified biologists and consist of:

- Two spring surveys (April through June) and two winter surveys (November through January). Each survey consists of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site.

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Conduct each survey within one 24-hour period. Focus visual inspections on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering). Use bat detectors, bat call analysis and visual observations during all dusk emergence and pre-dawn re-entry surveys.

- Data collection for each survey (whether bats are, or have been, present on the Project site) would assemblage of species using the site. Frequency of site use (including seasonal changes). Type of roost (i.e., maternity roost, day roost, night roost, feeding perch, mating roost, satellite roost, transitional roost or winter hibernaculum). Location, ambient temperature, internal dimensions and the aspect and orientation of the roost. Spatial and temporal distribution of bat activity. Flight paths, exit and entrance points. Intensity of bat usage (i.e., number of bats, time and duration of use). Identification of any survey constraints.

781-600

**Comment 21: Section 3.7.7.2 BIO-MM#26 Implement Bat Avoidance and Relocation Measures, Avoidance Bats**

If bats are found to occupy the Project site, CDFW recommends the general bat avoidance, minimization and mitigation measures outlined below.

- Avoid direct and indirect impacts to roosting sites by establishing a no-disturbance buffer of 300 feet around roost sites.
- Prohibit clearing and grubbing adjacent to the roost site and lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost. Prohibit the operation of internal combustion equipment, such as generators, pumps and vehicles within 300 feet of the roost site. Prohibit the use of bird netting.
- If avoidance of roost sites is infeasible, maintain portions of the features that provide naturalized habitat to the greatest extent possible and improve existing roost sites and/or provide new roost sites on buildings or on the Project site. Implement these measures only after consultation with CDFW.
- New roost sites must be in place prior to the initiation of Project-related activities to allow enough time for bats to relocate.
- Design and locate new and enhanced roost sites to be compatible with the bats' search image and habitat requirements (i.e., thermal regulation, interior size, ventilation, etc.). Design new and enhanced roost sites in consultation with CDFW.

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781-600 • Exclude bats from directly affected work areas selectively and only to the extent necessary to prevent morbidity or mortality to the colony. Use one-way bat exclusion devices, installed in a bat-safe way, to exclude bats and then use expandable foam, steel wool or other method to block the entrance, after the bats have gone. Exclude bats only after consultation with CDFW, at a time that is compatible with the species' normal behavior patterns (i.e., breeding, feeding, hibernating, etc.). In general, exclusions shall not occur during the maternity/pup-rearing season nor during the hibernation season, as determined by conditions at the Project site.

781-605 could intercept the subsurface flow that feeds springs and seeps, impacting critical fish and wildlife resources.

781-606 **Section 3.8.4.4 Pages 3.8-18 and 3.8-19**

The Methods for Determining Significance under CEQA section does not address potential changes to groundwater flows that express on the surface as springs and seeps. Impacts to these features could pose a significant impact to local or regional fish and wildlife resources. The Hydrology and Water Resources section focuses solely on larger alluvial groundwater basins and does not evaluate these smaller-volume groundwater resources that some ecosystems may be locally dependent.

781-601 **Comment 22: Section 3.7.7.2 BIO-MM#27 Implement Bat Exclusionary and Deterrence Measures Pages 115-116**

CDFW recommends that the bat roost relocation plan be submitted for CDFW review prior to construction activities.

781-607 **Section 3.8.6.3 Pages 3.8-72 through 3.8-74**

Impact HWR #8 does not address the potential permanent impacts to springs and seeps from alterations to, and interruptions of groundwater flow patterns. The permanent loss of springs and seeps due to project construction could constitute a significant effect under CEQA and should be included in the DEIR/EIS analysis.

781-602 **Comment 23: Section 3.7.7.2 BIO-MM#28 Conduct Pre-Construction Surveys for Ringtail and Ringtail Den Sites and Implement Avoidance Measures Page 116**

This measure indicates that it would guide future protective measures and relocation. Ringtail is a State Fully Protected species, and relocation is not permitted. CDFW recommends that this mitigation measure be revised. CDFW advises that a monitor be present during ground-disturbing activities at occupied dens.

**Comment 25: Biological Resources Technical Report Comments and Recommendations**

CDFW offers the following comments and recommendations on the BARTR prepared to evaluate the biological resources present in or potentially affected by the Bakersfield to Palmdale Section of HSR cited in the Draft EIR/EIS.

781-603 **Comment 24: Section 3.8 Hydrology and Water Resources (HWR)**

The Methods for NEPA and CEQA Impact Analysis (Section 3.8.4.3) and Methods for Determining Significance under CEQA (Section 3.8.4.4) do not appear to be inclusive of the resources stated in Floodplain Functions and Values (Section 3.8.5.7 page 3.8.37) and potential impacts to the Surface Water Beneficial Uses identified in the Surface Water Quality section (3.8.5.6), and instead focus almost entirely on the Federal Emergency Management Agency (FEMA) definition of Floodplain and Floodway. Potential impacts to important functions, such as habitat and wildlife beneficial uses, and values of groundwater and surface water features should be included in the impact analysis.

**Section 5.2 General Comments:**

781-608 The updated Redacted Revised Draft Final BARTR - November 2018. Pages 6-3  
781-609 through 6-21 appear to be missing. The DEIR does not contain the suggested updated hydrology reports to reflect wet conditions resulting from the 2017 rainy season and does not contain updated vegetation surveys to better capture on-site vegetation  
781-610 resulting from the 2017 rainy season. The DEIR fails to utilize a range of estimates for acreage of impacts to allow for variability in conditions and limited accuracy due to incomplete survey data.

781-604 **Section 3.8.4.1 Page 3.8-10**

The Study Area for Analysis definitions of Surface Waters and Groundwater exclude springs and seeps which are important water resources for fish and wildlife resources.

781-611 Based on a comparison of the BARTR Aquatic Resources Delineation and other data sources, it appears that many features which have been mapped in several state and federal data sets are not included in the BARTR, including riverine, freshwater pond and lake resources. The current delineation mapping likely underestimates the level of direct/indirect impacts to state jurisdictional features. CDFW recommends that the impact analysis should also evaluate the direct and cumulative impact of isolating streams/watercourses by impacting the upper and lower reaches of features which then can affect hydrological functions and values of the entire section or watershed area.

781-605 **Section 3.8.4.2 Pages 3.8-10 through 3.8-15**

The potential for temporary and permanent impacts to surface features fed by subsurface flow such as springs and seeps are not analyzed and addressed. Tunneling

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781-612 | **Palmdale Station:** The BARTR discusses the Palmdale station in various sections (e.g., Sections 2.2.2 and 7.2). It is recommended that additional information be provided regarding moving this station to the west to avoid/reduce impacts to Una Lake and State-listed species that are known to occupy the area. CDFW recommends that such an alternative be retained in the Project EIR/EIS as a potentially feasible alternative that would attain most of the basic objectives of the project and avoid and/or substantially reduce/lessen significant impacts to biological resources (Pub. Resources Code section 21002 and state CEQA Guidelines section 15126.6 [a]).

781-615 | species would require appropriate permits (e.g., scientific collecting) from the State and is not considered mitigation for impacts to this species.

781-613 | **Section 6.3.15 Southwestern Willow Flycatcher (*Empidonax traillii extimus*) Page 6-48**

781-616 | **Section 6.3.29 Western Pond Turtle (*Actinemys marmorata*) Page 6-62**

This section appears to exclude any of the Antelope Valley area as within range of this SSC and concludes that the species is considered to have a low probability of occurrence within the BSA. Areas at in the southern portion of the alignment, near the Palmdale lake and Una Lake areas contain potentially suitable aquatic habitat for this species as well as potential suitable upland habitat for this species may occur in the vicinity of appropriate aquatic habitats. CDFW recommends that the potential for this species to occur within the BSA be reassessed while considering rainfall from 2017 to present date.

This section states that, "willow flycatchers are common in the region during migration (eBird), but virtually all of these are believed to be little willow flycatchers (*E. t. brewsteri*), rather than southwestern willow flycatchers (Unitt 1987,2004; Allen et al. 2016)." The State listing of the full species as endangered includes all subspecies; *Empidonax traillii* (willow flycatcher), *Empidonax traillii brewsteri* (little willow flycatcher), and *Empidonax traillii extimus* (southwestern willow flycatcher). Based on the information provided in the BARTR, CDFW does not concur that the low probability of occurrence concluded for southwestern willow flycatcher also applies to willow flycatcher and little willow flycatcher. Suitable habitat appears to be absent within the Biological Study Area (BSA) so the species is considered to have a low to moderate probability of occurrence. Nevertheless, depending on the chosen alternative, the project may affect up to 25 acres of potentially suitable southwestern willow flycatcher habitat as summarized in Table 7.3.

781-617 | **Section 6.3.30 Mountain Plover (*Charadrius montanus*) Page 6-63**

As indicated in the BARTR, CDFW agrees that there is suitable foraging habitat and a high probability of encountering this state SSC in the southern portion of the alignment, particularly the Antelope Valley area. Any proposed IAMFs for this species should avoid impacts to this species to the maximum extent practicable and include pre-construction surveys for nesting.

781-614 | **Section 6.3.16 Least Bell's Vireo (*Vireo bellii pusillus*) Page 6-49**

781-618 | **Section 6.3.31 Burrowing Owl (*Athene cunicularia*) Page 6-64**

This section notes that, evidence of burrowing owl (BUOW) activity (pellets, whitewash) was found in areas dominated by alkali desert scrub, desert scrub, Joshua tree woodlands, and annual grassland habitats with appropriate burrows (Figure 6-4). Four BUOW nests were found within the raptor survey area during the 2016 raptor surveys, two near Bakersfield and two in the Antelope Valley. A total of 19 BUOW detections were recorded in those areas. This species was not included in the HSR modeling. The IAMF for this State SSC should include the following: Updated focused surveys for the BUOW to accurately quantify the magnitude of impact and to develop an avoidance/mitigation strategy in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (March 7, 2012) and the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines (April 1993). CDFW considers the loss of occupied BUOW habitat significant, at a project level and cumulatively, without adequate mitigation; CDFW recommends that mitigation land which supports an active BUOW population be required for the project to address impacts to on-site occupied BUOW habitat. Mitigation lands for any unavoidable impacts to occupied BUOW habitat should include occupied BUOW burrows and be of sufficient acreage and vegetative compendium to support foraging activities. CDFW acknowledges that in section 8.2.5 the DEIR/EIS indicates that the Authority will follow protocol set forth in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). However, additional description regarding the mitigation lands should be provided.

This section acknowledges that, "sources, including the CDFG and Point Reyes Bird Observatory, indicate the species occurs near aquatic features in the Antelope Valley within the BSA (Point Reyes Bird Observatory 2004)" and that "additional observations reported in eBird come from Piute Ponds (approximately 2.5 miles from the BSA) but then later concludes that "it is considered to have a low probability of being present in suitable portions of the BSA." Based on the information presented in the BARTR, CDFW recommends that probability of occurrence should be identified as at least "moderate".

781-615 | **Section 6.3.26 California Legless Lizard (*Anniella pulchra*) Page 6-58**

As indicated in the BARTR, CDFW agrees that there is a high probability of encountering this Species of Special Concern (SSC) in the southern portion of the alignment, particularly the Antelope Valley area. Any proposed impact avoidance and minimization features (IAMFs) for this species should avoid impacts to this species to the maximum extent practicable and include pre-construction surveys to identify and relocate any species to nearby suitable (and conserved) habitat. Relocation of this



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## II. Editorial Comments and/or Suggestions

781-619

**Nesting birds:** CDFW encourages initiation of Project-related ground disturbing activities occur during the bird non-nesting season. However, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project's applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, high levels of human activity, and movement of equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends the work causing that change cease and that CDFW be consulted for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Smaller no-disturbance buffers may still be adequately protective when there is compelling biological or ecological reason for a modified buffer, such as when the construction area would be concealed from a nest site by topography.

781-620

**Lake and Streambed Alteration:** Project-related activities have the potential to substantially change the bed, bank, and channel of wetlands and waterways on site, which are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq., therefore, notification is warranted. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are episodic, ephemeral, or intermittent as well as those that are perennial. This includes ephemeral streams, desert washes, and watercourses with

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subsurface flow. It may also apply to work undertaken within the floodplain of a body of water.

781-621

As also indicated in Section 6.6, it appears that desert washes, episodic features and claypan/pooled areas have been underrepresented in the aquatic delineation. CDFW recommends that additional delineation work (aerial interpretation, field surveys, imagery processing) be conducted to update the results incorporated to provide a more accurate representation of baseline aquatic resources to provide a robust impact analysis. CDFW recommends including an updated inventory of aquatic features, analysis of upstream/downstream impacts and isolation, hydrologic connectivity between aquatic features and project features to maintain hydrology with and adjacent to the Project footprint.

781-622

CDFW finds that the definition provided in the DEIR/EIS does not encompass all streams that may be impacted within the Project footprint; therefore, CDFW advises the definition of stream in the DEIR/EIS be modified to incorporate sufficient parameters that these waterways will be captured by the definition and concurrently included in the analysis of impacts to features subject to 1602 jurisdiction. As currently analyzed in the DEIR/EIS, CDFW has concerns that stream acreage and biological resources are vastly under-estimated. CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (Agreement); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts, a subsequent CEQA analysis may be necessary for Agreement issuance. CDFW advises to be conservative with the estimate of impacts subject to 1602 jurisdiction. If this amount turns out to be greatly underestimated and thus the analysis of impacts potentially inaccurate it could pose significant issues and possible delays for permit issuance.

781-623

Finally, to minimize impacts to areas subject to 1602 jurisdiction and to maintain hydrological function upstream/downstream of the proposed alignment, CDFW recommends that features which allow movement of water from rainfall events and other hydrologic sources be incorporated into the Project. These features can be a combination of culverts and bridges based on the extent of the hydrological features, and in some cases extension of viaducts currently proposed. In addition, the features to allow hydrologic passage should also be designed to allow wildlife passage where possible.

781-624

**Wildlife Corridor Movement:** The DEIR/EIS asserts, "Wildlife would be able to cross the alignment between at-grade segments where the HSR would be elevated on a viaduct or an underground tunnel." This statement assumes that the viaduct locations will remain in place; however, as with other HSR segments currently under construction, these viaduct locations could later be redesigned to be fenced at-grade and impermeable to wildlife. CDFW advises that a stronger design criterion should be developed and included into the DEIR/EIS to ensure that areas of planned viaduct cannot be changed to less permeable features by the Design-Build contractor.

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As CDFW has discussed during early consultation and in previous comment letters to the Authority, the single biggest potential biological impact arising from construction of the HSR project is the impact on regional movements of wildlife and connections between habitat. The HSR has the potential to disrupt wildlife movement corridors that are already hindered with existing obstacles, create long stretches of impediments, and further narrow areas of low or compromised permeability, many of which are already threatening the continued viability of several species. Construction of access-controlled rail lines may create barriers to the movement of wildlife, thereby cutting them off from important food, shelter, and breeding areas. Resulting isolation of subpopulations limits the exchange of genetic material and puts populations at risk of local extirpation through genetic and environmental factors. Barriers can prevent the re-colonization of suitable habitat following natural population expansions, ultimately putting the species at risk of extinction.

The construction and operation of the HSR will severely inhibit north-south as well as east-west wildlife movement along the Bakersfield to Palmdale segment. While the Authority suggests it will examine the feasibility of implementing a variety of wildlife passages to aid animal movement along both sides of the rail alignment, it is unclear where and at what intervals these will be placed. This is a concern, especially considering recent design changes in the Fresno to Bakersfield segment of the Project where originally designed elevated structures are being changed to an at-grade design and elevated structures over waterways are being significantly reduced in length, narrowing the available space for wildlife passage. Later changes of this nature could limit the ability of species such as San Joaquin kit fox and mountain lion to move unimpeded throughout its historic range.

Potential future design changes that could result in reduced wildlife permeability and increased wildlife impacts need to either be considered in the DEIR/EIS, or somehow precluded from occurring at the construction phase. An elevated or below ground rail design could reduce the impacts that the HSR system would have on animal movement and migration, by allowing wildlife to pass unimpeded underneath or over the top of the entire length of the railway while providing access-controlled tracks. Elevated or below ground railways would be more effective in facilitating animal movement than the proposed wildlife underpasses and overpasses, which are not always effective or have untested efficacy for most taxa. Because wildlife would be more likely to move underneath an elevated rail, or over a below ground rail, as opposed to using a tunnel or vegetated overpass, CDFW advises the inclusion of the at-grade embankment in the DEIR/EIS as an impact to wildlife movement and that this impact be thoroughly analyzed as a barrier to movement, gene flow, reproductive success, loss of colonization opportunities, and to discuss this in the context of planned wildlife crossings.

If wildlife passage structures will be used instead of elevated or below ground rail, CDFW continues to recommend that an extensive evaluation be conducted before final wildlife passage locations are selected to determine the appropriate and most effective

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locations and number and types of such wildlife passage structures. As was recommended in previous correspondence, methods to determine best locations of wildlife passage structures or avoidance should include things such as: 1) track station surveys; 2) ditch and canal crossing surveys; 3) monitoring trails with infrared or Trailmaster cameras; and 4) geographic information system (GIS) habitat modeling to identify likely wildlife travel corridors and anthropogenic barriers (such as highways, canals, reservoirs) at the landscape level. In addition, wildlife habitat passage structures, such as underpasses, overpasses, elevating or placing below grade the alignment and tunnels, may not be suitable for all species and locations and would need to be evaluated carefully. Dedicated wildlife crossing structures should ensure permeability, be evaluated on a species-specific basis, and required to meet specific minimum dimensions for increased probability of wildlife utilizing these structures for crossing opportunities.

Specific care should be afforded to ensure that any wildlife crossing structure design incorporates generous openness and clear line of sight from entry to exit to maximize detection of the crossing by species at the time of encounter and to ensure use. Currently, the DEIR/EIS does not provide specific dimensions listed for the openness, what constitutes a "slight grade of approaches to prevent flooding", and the number of crossings that would ensure permeability for such a long linear feature. Without these specifics and other relevant assumptions, it is not possible to determine if the effectiveness of this mitigation measure will reduce the level of significance. CDFW recommends that wildlife crossing locations, configurations, and demonstrated efficacy for target species use (e.g., mountain lion, desert kit fox, Mohave ground squirrel, etc.) be a requirement of the final design.

Finally, the DEIR/EIS does not analyze the impact of design elements, such as the Intrusion Protection Barriers (IPBs) and Access Restriction (AR) fencing, in terms of impacts to wildlife corridor movements and/or the reduction of effectiveness of wildlife crossings compounded by the additional infrastructure fencing. The DEIR/EIS includes information that the at-grade segments of the project would be entirely fenced or walled and thereby eliminate adverse interactions with wildlife, including direct strikes. While this may be true in some instances at the individual or localized level, the total length and linear nature of the project's fencing/walls, along with other projects in the area, may cause site-specific and cumulative impacts involving species fragmentation and impediments to wildlife movement. CDFW agrees that inclusion of proper placement and design of the dedicated wildlife crossings will be a very important component of the environmental planning process for the project. We look forward to reviewing the full analysis on wildlife movement including the further regional study of habitat connectivity being overseen by South Coast Wildlands. Furthermore, the DEIR/EIS notes that an inventory of drainage or crossing features (between Bakersfield and State Route 138) was developed with field surveys from the year 2012 and later updated in October 2014 and August 2015. CDFW requests a copy of this dataset and will review the full analysis on wildlife movement. CDFW also agrees that wildlife movement areas (open connectivity) are also important for plant species.

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**Cumulative Impacts:** Multiple related projects have been proposed within the Kern and LA counties as well as the City of Bakersfield, City of Lancaster, and City of Palmdale with similar impacts to biological resources. General impacts from these projects include habitat fragmentation, degradation, habitat loss, and potential loss of individuals to the population. The DEIR/EIS uses reference sources for future project dated from 1993-2016, which are outdated and have been completed based on project timing. CDFW recommends the Authority consider referencing updated sources of all approved and future projects when determining impact significance to biological resources. One such future transportation project that was not analyzed is the DEIR/EIS is the Virgin Train (XpressWest) high-speed train project that goes from the City of Victorville to the City of Las Vegas, Nevada, with a connection at the Palmdale Station.

781-626

**Use of Modeling for Impact Analysis**

CDFW has previously expressed its reservations, in writing, with using current predictive models for the impact analysis necessary for CDFW to issue an ITP without having site-specific surveys to supplement the modeling effort. We are concerned that the lack of current, site-specific information to accurately quantify the magnitude of impact to CESA-listed species may cause delays in issuance of an ITP. CDFW is also concerned how the modeled output is proposed to be used for areas where there are no occurrence data. As a reminder, CNDDDB captures voluntarily reported detections only; areas without records should not be treated as areas where species do not occur (unless they have been surveyed recently with negative findings). Our primary concerns with using modeling without site-specific protocol surveys to assess and quantify impacts for purposes of CESA include the following:

- Modeling alone may not capture the full extent of species occurrences and habitat suitability due to data sources, timing of surveys, limited access to significant portions of the alignments, and the inherent accuracy issues associated with using regionally-based data to determine site-specific impacts without a reliable verification method (e.g., protocol surveys). Using predictive modeling only to evaluate species presence/absence and to quantify project-specific impacts (acreages) could miss marginal or atypical habitat usage, especially by high mobile species, and impose a risk of unauthorized take in areas not covered by the ITP or grossly underestimates the basic level of take coverage in the ITP necessary to complete the project. In addition, some areas not ranked as suitable have not been surveyed recently or have never been surveyed.
- Due to the stochasticity and cryptic nature of some species, it is very difficult to accurately "detect" species and determine mitigation requirements using modeling. Some species are unpredictable due to variables the modeling may not or cannot adequately capture, habitat requirements that are constantly evolving over time or space and/or have distributions that can be analyzed

781-626

statistically but not be predicted precisely. For example, opportunistic species can have dynamic ranges and use areas not ranked at all by the model based on its current parameters.

- As an estimation of reality, the current model includes a defined range of species and conditions (using the rules selected) based on a snapshot of time and may not accurately capture use by all species when impacts occur and/or translate down to the site-specific (e.g., footprint) level. Modeling alone can provide a statistically significant underrepresentation of habitats potentially occupied by State-listed species. For example, some listed plants may only occur at specific times of the year under certain conditions and only be adequately evaluated with protocol surveys within the project footprint at the appropriate time. Likewise, some state fully protected bird species not known to nest or breed in the project area (e.g., white-tailed kite, peregrine falcon and bald eagle) could be transient to the area at certain times of the year.

CDFW continues to emphasize that although the current modeling can be a helpful tool for the Authority's own preliminary evaluation, as well as for compensatory mitigation planning, it will not be a substitute for our analysis when it comes to CESA permitting. CDFW will need to conclude whether or not listed species will be impacted by the project. If predictive modeling is used in lieu of biological surveys by the HSRA, CDFW's ITP related analysis we will need to err on the side of assuming presence in the Project footprint. Our impact and take analysis and required minimization and mitigation measures will be reflective of this assumption.

781-627

**Use of Pre-Construction/Modified Protocol Surveys**

CDFW recognizes that the Authority proposes to use additional surveys for certain species to supplement the modeling results and to refine the impact analysis. It is important to acknowledge that pre-construction or modified surveys are not equivalent to protocol surveys that are designed for maximum detectability. Unless these supplemental surveys are conducted at the appropriate time of year/conditions and sufficiently in advance of construction, their utility for use as "negative" surveys may be limited. Problems that may occur with the use of these types of surveys include the following:

- If they are conducted in a drought period, plant populations may not be detected adequately characterized and could cause construction delays of the project. Having at least two years of site-specific surveys (e.g., spring of 2016 and 2017) would greatly enhance the reliability of the modeling and related impact analyses;
- Scheduling surveys too early or too late can allow for situations to develop and delay construction (e.g., establishment of pre-natal dens, detection of unexpected plant populations).

# Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

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Because CDFW must determine an estimate of take and impact analysis for State-listed species to issue an ITP, we recommend a two-pronged survey approach that consists of protocol then pre-construction verification surveys at appropriate times for a given species. We recommend that this approach be discussed and incorporated where appropriate in the DEIR/EIS. CDFW recommends the use of protocol surveys for all State-listed species in appropriate habitat features, once project right-of-way is secured by the Authority. CDFW is available to meet to discuss what types of surveys are acceptable for State-listed species. Alternatively, the Authority can assume presence of State listed species in all suitable habitat features.

781-628

### Use of Model for Identifying Mitigation

We understand that the Authority intends to use model output to develop a compensatory mitigation program to address permanent impacts to State-listed species. CDFW acknowledges that modeling can be very useful to identify regionally important areas where conservation could be targeted for general (i.e., non-mitigation) purposes and also to help focus where additional information is needed to accurately determine site-specific impacts and appropriate mitigation. Mitigation based primarily on regional modeling may not fit individual species requirements under CESA very well, especially if protocol surveys have not been conducted (and are not planned) for the impacted area and/or the proposed mitigation lands. Regionally based approaches for CESA mitigation typically occur in NCCPs, where site-specific surveys and management, monitoring and reporting requirements for habitat and species are built into the program. Because CESA requires that impacts be fully mitigated, mitigation for impacts to habitat occupied by State-listed species should include occupied habitat. For example, it is our understanding that for some species the current approach is to mitigate for multiple species simultaneously (e.g., desert tortoise and Mojave ground squirrel). This approach may not be acceptable unless presence for both species is adequately documented on the proposed mitigation lands and the take for each species is fully mitigated.

781-629

### ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDDB. The CNDDDB field survey form can be found at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

781-630

### FILING FEES


If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist the Authority in identifying and mitigating the Project's impacts on biological resources.

781-631

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Please see the enclosed Mitigation Monitoring (MMRP) table which corresponds with recommended mitigation measures in this comment letter. If you have any questions, please contact Ms. Primavera Parker, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 243-8142, or by e-mail at [Primavera.Parker@wildlife.ca.gov](mailto:Primavera.Parker@wildlife.ca.gov).

Sincerely,

DocuSigned by  
  
FA6F62DB-1506-41CF-AD4A-85A70352BCC

Julie A. Vance  
Regional Manager

Attachment

ec: See Page Thirty-six

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Central Valley Regional Water Quality Control Board

CDFW Region 4: Ferranti, Tomlinson, Parker  
CDFW Region 5: Wilson-Olgin, R. Rodriguez

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**Attachment 1**

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM  
(MMRP)**

**PROJECT: California High-Speed Rail Project (Bakersfield to  
Palmdale Section)**

**SCH No.: 2009082062**

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure: Fully Protected Raptor Habitat Assessment	
Mitigation Measure: Fully Protected Raptor Surveys	
Mitigation Measure: Fully Protected Raptors Avoidance	
Mitigation Measure: SWHA Habitat Assessment	
Mitigation Measure: SWHA Surveys	
Mitigation Measure: SWHA Avoidance	
Mitigation Measure: SWHA Nest Tree Mitigation	
Mitigation Measure: SWHA Compensation for Loss of Foraging Habitat	
Mitigation Measure: SWHA Take Authorization	
Mitigation Measure: TRBL Habitat Assessment	
Mitigation Measure: TRBL Surveys	
Mitigation Measure: TRBL Avoidance	
Mitigation Measure: TRBL Take Authorization	
Mitigation Measure: BNLL Surveys	
Mitigation Measure: BNLL Avoidance	
Mitigation Measure: DETO surveys	
Mitigation Measure: DETO Take Authorization	
Mitigation Measure: SJKF Take Authorization	
Mitigation Measure: SJKF Compensatory Mitigation	
Mitigation Measure: MGS Surveys	

1

Rev. 2013.1.1

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Mitigation Measure: MGS Avoidance	
Mitigation Measure: MGS Take Authorization	
Mitigation Measure: CRLF Habitat Assessment	
Mitigation Measure: CRLF Survey	
Mitigation Measure: CRLF Avoidance	
Mitigation Measure: Western Pond Turtle Surveys	
Mitigation Measure: Western Pond Turtle Avoidance	
Mitigation Measure: Western Spadefoot Toad Surveys	
Mitigation Measure: CBB Surveys	
Mitigation Measure: CBB Take Avoidance	
Mitigation Measure: Joshua and Oak Tree Woodland Habitat Compensation and Preservation	
Mitigation Measure: Special-Status Plant Habitat Assessment	
Mitigation Measure: Special-Status Plant Surveys	
Mitigation Measure: Special-Status Plant Avoidance	
Mitigation Measure: Special-Status Plant Take Authorization	
Mitigation Measure: Desert Kit fox survey	
Mitigation Measure: Desert Kit avoidance	
<i>During Construction</i>	
Mitigation Measure: Fully Protected Raptors Avoidance	
Mitigation Measure: SWHA Avoidance	
Mitigation Measure 12: TRBL Avoidance	
Mitigation Measure: BNLL Avoidance	
Mitigation Measure: MGS Avoidance	
Mitigation Measure: CRLF Avoidance	
Mitigation Measure: Western Pond Turtle Avoidance	
Mitigation Measure: CBB Take Avoidance	
Mitigation Measure: Special-Status Plant Avoidance	
Mitigation Measure: Desert kit fox avoidance	

2

Rev. 2013.1.1

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020)

### 781-576

The California Department of Fish and Wildlife (CDFW) comments that it is unclear whether the mitigation measures described in the Draft EIR/EIS will be enforceable or sufficient in reducing impacts to a level that is less than significant.

The Authority appreciates the CDFW's comments on the Draft EIR/EIS for the Bakersfield to Palmdale Project Section of the California HSR Project. In subsequent individual comments, the CDFW provided specific suggestions regarding special-status species, other biological resources, and permitting, as well as revisions to specific mitigation measures or additional mitigation measures to avoid, minimize, or mitigate effects. Each of the CDFW's specific comments is addressed in the responses for those specific comments.

As a general matter, the Draft EIR/EIS includes an explanation of how the mitigation measures will be made enforceable in Section 3.7.7. The analysis in Impacts BIO#1 through BIO#13 describe how the mitigation measures will effectively reduce the impact below the applicable California Environmental Quality Act (CEQA) threshold, thereby reducing the impact to less than significant. The impact avoidance and minimization features (IAMFs) and mitigation measures are required for the project and will be incorporated into the Mitigation Monitoring and Enforcement Plan and made enforceable. The contract with the design-build contractor and the associated implementing manual will ensure common interpretation of the design features and mitigation measures so that they are fully and effectively implemented. The Authority is committed to implementing these measures and some of these measures will also be enforceable by regulatory/resources agencies through the agreements and permits that the Authority obtains from such agencies.

### 781-577

The commenter requests mitigation for raptors and references Section 3.7.7.4, Impact BIO#11, Direct Impacts on Special-Status Wildlife-Birds, and Impact BIO#12, Indirect Impacts on Special-Status Wildlife-Birds (pages 75 through 78), as well as BIO-MM#24 (page 127).

The Bakersfield to Palmdale Project Section EIR/EIS does not include a subsection 3.7.7.4 in Section 3.7, Biological and Aquatic Resources. Impact BIO #11 and Impact BIO#12 are not related to impacts on Wildlife-Birds. There is no BIO-MM#24.

Therefore, this response will provide information regarding BIO impacts identified for special-status raptors and corresponding IAMFs and appropriate mitigation measures for raptors that are in the Bakersfield to Palmdale Project Section EIR/EIS analysis to respond to the text discussion following the heading in the CDFW letter.

Section 3.7.6.4 of this Final EIR/EIS identifies Impact BIO#2, Construction Impacts on Special Status Wildlife Species (including raptors), and Section 3.7.6.5 identifies Impact BIO#8, Operational Impacts on Special Status Wildlife Species (including raptors). Section 3.7.4.2 identifies BIO IAMF#12, Design the Project to be Bird Safe, and Section 3.7.7 outlines mitigation measures for various raptors in BIO-MM#14 through BIO-MM#18, BIO-MM#20, BIO-MM#21, BIO-MM#43, BIO-MM#44, BIO-MM#56, BIO-MM#63, and BIO-MM#65 through BIO-MM#74.

The Authority believes that the BIO IAMFs and mitigation measures in the Draft EIR/EIS are similar to measures proposed by CDFW in the comment letter dated April 28, 2020. The measures outlined provide protection for nesting raptors, including fully protected raptors, as well as specific survey timing and buffers. Surveys for fully protected raptor species would be conducted within 0.5 mile of the project footprint, as suggested by the CDFW, and 0.5-mile buffers would be used for fully protected raptors.



## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-578

The commenter requests mitigation for Swainson's hawk and references Section 3.7.8, Biological Resources and Wetlands; Mitigation Measures BIO-MM#26 through BIO-MM#28 (pages 128 through 129) and BIO-MM#50 (page 138).

Section 3.7.8 of the Bakersfield to Palmdale Project Section EIR/EIS includes the National Environmental Policy Act (NEPA) Impacts Summary. The references to BIO-MM#26 through BIO-MM#28 and BIO-MM#50, which are in Section 3.7.7.2, appear to be incorrect as they do not relate to Swainson's hawk.

Therefore, this response will provide information regarding BIO impacts identified for Swainson's hawk, and applicable mitigation measures for Swainson's hawk that are in the Bakersfield to Palmdale Project Section EIR/EIS analysis to respond to the text discussion following the heading in the CDFW letter.

The Authority concurs, as noted in the Draft EIR/EIS, that Swainson's hawk may nest in the vicinity of the project. Section 3.7.6.4 of this Final EIR/EIS identifies Impact BIO#2, Construction Impacts on Special Status Wildlife Species (including raptors), and Section 3.7.6.5 identifies Impact BIO#8, Operational Impacts on Special Status Wildlife Species (including raptors). Section 3.7.7 outlines mitigation measures for Swainson's hawk in BIO-MM#14, BIO-MM#15, BIO-MM#17, BIO-MM#18, BIO-MM#43, BIO-MM#56, BIO-MM#63, and BIO-MM#74.

The Authority believes the BIO mitigation measures applicable to Swainson's hawk in the Draft EIR/EIS are similar to measures proposed by CDFW in the comment letter dated April 28, 2020. The measures outlined provide protection for nesting raptors, including fully protected raptors, as well as specific survey timing and buffers. Surveys for Swainson's hawk would be conducted within 0.5 mile of the project footprint, as suggested by the CDFW, and 0.5-mile buffers would be used for active nests.

### 781-579

The commenter requests mitigation for Swainson's hawk.

The commenter's reference to BIO MM#28 appears to be incorrect, as the measure does not pertain to Swainson's hawk. Therefore, this response will provide information regarding BIO impacts identified for Swainson's hawk, and corresponding IAMFs and appropriate mitigation measures for Swainson's hawk that are in the Bakersfield to Palmdale Project Section EIR/EIS analysis to respond to the text discussion following the heading in the CDFW letter.

BIO MM#18 addresses the avoidance of Swainson's hawk nests and defines an active nest used one or more times in the last five years. If a nest is found within a 0.5 mile area of the work area boundary during the nesting season, the nest will be monitored and buffers will be established in consultation with CDFW. If an occupied Swainson's hawk nest tree is to be removed, an incidental take permit will be obtained and impacts will be minimized and fully mitigated.

BIO MM#43 provides compensatory mitigation for the loss of Swainson's hawk nesting trees and habitat. The Authority will replace any affected trees used by Swainson's hawk for nesting and foraging habitat. The measure lists three specific criteria for lands proposed as compensatory mitigation.

The Authority recognizes that the California Fish and Game Code defines "Take" as, hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. That said, BIO-MM#18 and #43 provide adequate mitigation for Swainson's hawk active nesting and foraging habitat and implementation of these mitigation measures are anticipated to lower the risk of having to request a Take permit.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

781-580

The commenter requests mitigation for Swainson's hawk.

The following mitigation measures adequately address impact concerns for the Swainson's hawk:

**BIO MM#17: Conduct Surveys for Swainson's Hawk Nests and Implement Avoidance and Minimization Measures**

This measure requires surveys be performed no more than one year prior to the commencement of construction activities and within the work area and a 0.5-mile buffer. Additionally, no sooner than 30 days prior to construction, pre-construction surveys of nests identified during earlier surveys will be conducted to determine occupancy. The surveys will follow the protocols set out in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000), and for the areas within the Antelope Valley, the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (California Energy Commission and California Department of Fish and Game, 2010).

BIO-MM#18 addresses the avoidance of Swainson's hawk nests and defines an active nest as having been used one or more times in the last five years. If a nest is found within a 0.5 mile area of the work area boundary during the nesting season, the nest will be monitored and buffers will be established in consultation with CDFW. If an occupied Swainson's hawk nest tree is to be removed, an incidental take permit will be obtained and impacts will be minimized and fully mitigated.

BIO-MM#43 provides compensatory mitigation for the loss of Swainson's hawk nesting trees and habitat. The Authority will replace any affected trees used by Swainson's hawk for nesting and foraging habitat. The measure lists three specific criteria for lands proposed as compensatory mitigation.

BIO-MM#17, BIO-MM#18, and BIO-MM#43 adequately address issues and concerns related to Swainson's hawk surveys, buffers, and mitigation.

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## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-581

The commenter requests mitigation for tricolored blackbird and references Section 3.7.7.4, Impact BIO#11, Direct impacts on Special-Status Wildlife-Birds, and Impact BIO#12, Indirect impacts on Special-Status Wildlife-Birds (pages 75 through 77), as well as Section 3.7.7.2, BIO-MM#69, Conduct Surveys and Implement Avoidance Measures for Active Tricolored Blackbird Nest Colonies (page 137).

The Bakersfield to Palmdale Project Section EIR/EIS does not include a Section 3.7.7.4, and Impact BIO #11 and Impact BIO#12 are not related to impacts to Wildlife-Birds. However, Section 3.7.7.2, BIO-MM#69, Conduct Surveys and Implement Avoidance Measures for Active Tricolored Blackbird Nest Colonies, is a correct reference. Note that the requested changes have been made BIO-MM#69 as follows:

Prior to initiation of construction at any location within 300 feet of suitable nesting habitat, The Project Biologist with experience surveying for and observing tricolored blackbird will conduct preconstruction surveys to establish use of nesting habitat by tricolored blackbird colonies.

Surveys will be conducted in suitable habitat within 300 feet of proposed construction areas, where access allows, during the nesting season (February 1–September 15).

If construction is initiated near suitable habitat during the nesting season, preconstruction nesting surveys will be conducted within 10 days prior to construction. If active tricolored blackbird nesting colonies are identified, construction activities will avoid the nesting colonies during the breeding season (February 1–September 15) to the extent practicable within 300 feet of the colony, consistent with the CDFW's Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015 (CDFW 2015). This minimum buffer may be reduced in areas with dense forest, buildings, or other habitat features between the construction activities and the active nest colony, or where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance as determined through coordination with CDFW. If tricolored blackbirds colonize habitat adjacent to construction after construction has been initiated, the Authority will coordinate with CDFW to determine the best course of action to avoid impacts.

### 781-581

The mitigation measures for Tricolored blackbird will be effective in avoiding, minimizing, and offsetting through compensatory mitigation effects to a less than significant level. Nonetheless, as noted in Table 2-26 of the Draft EIR/EIS, a requirement for an Incidental Take Permit under Section 2081 of the California Fish and Game Code is expected to be required for the project, and the Authority has obtained take permits for other high-speed rail (HSR) sections. The determination of what species will be covered by the Section 2081 permit will be made in coordination with CDFW at the time of the permit application.

### 781-582

The commenter requests mitigation for tricolored blackbird.

Mitigation measure BIO-MM#69 has been revised in the Final EIR/EIS, per CDFW's request. Refer to Response to Comment 781-581 for the requested changes.

### 781-583

The commenter requests that mitigation language for blunt-nosed leopard lizard and avoidance measures be clarified in detail and recommends conducting surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019b).

The Authority recognizes that the blunt-nosed leopard lizard is fully protected and that take of individuals must be avoided. The mitigation measures for this species (BIO-MM#11, BIO-MM#13, and BIO-MM#42) will avoid take. BIO-MM#11 and BIO-MM#13 as identified in the Draft EIR/EIS, are consistent with previously submitted comments from CDFW. The measures include surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019b) as recommended by CDFW.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-584

The commenter notes that the project footprint contains suitable habitat for desert tortoise and that, as such, protocol-level surveys should be conducted to evaluate project-related impacts. Further, in the case of positive survey results, the commenter recommends consultation with CDFW to avoid take and/or obtaining an Incidental Take Permit prior to any ground-disturbing activities, if necessary.

BIO-MM#79, included in Section 3.7.7.2 of this Final EIR/EIS, contains detailed measures to address potential impacts on desert tortoise. The measure specifies pre-activity clearance surveys in accordance with the 2010 U.S. Fish and Wildlife Service (USFWS) protocol Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*). Protocol level desert tortoise surveys are not required. The Authority will conduct pre-activity surveys within all Desert Renewable Energy Conservation Plan desert tortoise modeled suitable habitat found within the project footprint to avoid and minimize effects on individual desert tortoise. BIO-MM#79 also requires the preparation of a project-specific Desert Tortoise Translocation/Relocation Plan and numerous measures (e.g., exclusionary fencing, biological monitoring, equipment storage and operations procedures) to avoid and minimize potential impacts on this species. The Authority will obtain all necessary approvals and authorizations from USFWS and CDFW pertinent to desert tortoise prior to project implementation, including Incidental Take Permit coverage, if necessary.

### 781-585

The commenter notes that urban areas such as the City of Bakersfield are occupied by localized high densities of San Joaquin kit fox, contrary to what is implied by text in Section 3.7.6.4 of the EIR/EIS. The commenter also states that mitigation for the loss of all San Joaquin kit fox habitat, including urban habitat, should be provided.

In response to the commenter's comment, the following text in Section 3.7.6.4 has been revised in this Final EIR/EIS:

"Urban and agricultural lands affected by construction-period activities are not expected to: (1) provide conditions that support special-status plant species or special-status plant communities; (2) provide preferred habitat for special-status wildlife species; (3) support high-quality aquatic resources; or (4) facilitate the movement or migration of wildlife species. However, these areas often contain only degraded or marginal habitats that are used by a number of special-status wildlife species, in particular the San Joaquin kit fox, which is known to occur in such areas in urban Bakersfield."

BIO-MM#45, included in Section 3.7.7.2 of this Final EIR/EIS, specifies that compensatory mitigation for impacts on San Joaquin kit fox habitat will be mitigated at a minimum ratio of 1:1 for natural lands and at a ratio of 3:1 for suitable urban or agricultural lands, unless a higher ratio is required by regulatory authorizations issued under Federal Endangered Species Act and/or California Endangered Species Act (CESA). Thus, all suitable habitat for San Joaquin kit fox, including urban habitat, will be mitigated. The mitigation ratio for urban habitat was increased in response to the request from CDFW.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-586

The commenter indicates that there are Mohave ground squirrel occurrences within and adjacent to the project footprint and that the level of survey effort detailed in the Biological and Aquatic Resources Technical Report (BARTR; Authority 2018c) is indicative of a reconnaissance-level survey. As such, the commenter asserts that the probability of occurrence be identified as “moderate” and additional area be included as “suitable” within the urbanized area near Lancaster and Palmdale. Finally, the commenter provides recommended measures to address potential impacts on Mohave ground squirrel.

Focused surveys for Mohave ground squirrel were not conducted for the Bakersfield to Palmdale Project Section because of the low probability that this species is still present in the project vicinity. Section 5.4.2.6 of the BARTR describes the methodology for the general wildlife habitat assessment surveys. As described in Section 6.3.17 of the BARTR (Authority 2018c), although suitable habitat for this species is present and some portions of this area were formerly occupied, recent comprehensive survey data conducted by species experts between 2008 and 2012 indicate that this species is likely extirpated from the project vicinity. The Authority also consulted with species experts, including the California State University, Stanislaus Endangered Species Recovery Program (see Appendix H to the BARTR), who corroborated this assessment. Thus, the probability for occurrence of Mohave ground squirrel was determined to be low, and focused mitigation measures for this species are not recommended in the Draft EIR/EIS. Further, as stated in Section 5.4.2.6 of the BARTR, survey efforts from 1998 to 2012 in the SR 14 corridor between Lancaster and Palmdale did not detect any Mohave ground squirrels, and previous California Natural Diversity Database (CNDDDB) records in this area (i.e., Occurrences #24 and #26, associated with animals identified between 1920 and 1984) are associated with the historic range of this species.

The Authority is not aware of any recent species occurrences within or adjacent to the project footprint and at the time of the analysis, the Authority reviewed all records and consulted with species experts and determined that there was a low probability of occurrence. Based on previous discussions with Region 4 CDFW, CDFW indicated that it concurred with the proposal to rely on the habitat suitability model developed for the Desert Renewable Energy Conservation Plan in lieu of surveys. Therefore, no focused surveys are required.

### 781-586

Sections 3.7.4.2 and 3.7.7.2 of the EIR/EIS list general wildlife avoidance and minimization measures (i.e., BIO-IAMF#1 through BIO-IAMF#3, BIO-IAMF#5 through BIO-IAMF#12, and HYD-IAMF#1 and HYD-IAMF#2) and mitigation measures (i.e., BIO-MM#36, BIO-MM#55, BIO-MM#56, BIO-MM#58, BIO-MM#60 through BIO-MM#63, and BIO-MM#76 through BIO-MM#78) address the potential for impacts. If special-status species that were not expected are encountered during construction, the Authority will consult with CDFW to determine the appropriate course of action.

### 781-587

The commenter provides recommendations for mitigation for California red-legged frog.

As shown in Table 3.7-7 of this Final EIR/EIS, the project would not result in a temporary or permanent impact on California red-legged frog habitat. California red-legged frog has been extirpated from most of its former range and has never been documented within the project study area (where habitat suitability appears to be marginal at best). Therefore the assessment in the Final EIR/EIS of potential presence and potential to affect this species is accurate and no mitigation measures are proposed for this species.

If this special-status species is encountered during construction, while not expected, the Authority would coordinate with USFWS and CDFW to determine the appropriate course of action.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-588

The commenter states that western pond turtle has the potential to occur in the vicinity of the project and requests adoption of mitigation measures for western pond turtle.

Because of extensive population declines and the fact that it has been reported as extirpated (Jennings and Hayes 1994) or never known from the Tehachapi area (Thompson et al. 2016), the species is considered to have a low probability of occurrence within the project study area. Therefore, no effects on the species are anticipated and no mitigation measures are proposed for this species. This request does not meet the requirements for recirculation per CEQA Guidelines Section 15088.5.

### 781-589

The commenter requests consultation with CDFW to develop a plan to avoid impacts on western spadefoot toad.

Potential western spadefoot breeding habitat is sparse in the project study area but is present in seasonal wetlands as well as in temporary pools in artificial or natural depressions, both of which are classified as lacustrine habitat. Suitable upland habitat in the vicinity of this aquatic habitat includes annual grasslands, alkali desert scrub, blue oak woodland, montane hardwood, perennial grassland, riverine, and valley oak woodland. Therefore, it is considered to have a moderate probability of being present in suitable portions of the project study area. IAMFs discussed in Section 3.7.4.2 and mitigation measures in Section 3.7.7.2 of this Final EIR/EIS, specifically BIO-MM#7 Conduct Pre-Construction Surveys for Special-Status Reptile and Amphibian Species; BIO-MM#8 Implement Avoidance and Minimization Measures for Special-Status Reptile and Amphibian Species; and BIO-MM#36 Install Aprons or Barriers within Security Fencing, would avoid, minimize, and reduce potential unintentional adverse effects on the species.

### 781-590

CDFW recommends revisions to the mitigation measure for Crotch Bumble bee to further reduce impacts on the species.

Per CDFW's request BIO-MM#80 in Section 3.7.7.2 of this Final EIR/EIS has been revised to incorporate CDFW's recommendations.

### 781-591

The commenter states that the EIR/EIS lacks analysis for Joshua tree and oak woodland and does not identify an adequate buffer zone to protect Joshua tree and oak woodland.

Permission to Enter was not obtained for many parcels within the project footprint. Per the CEQA/NEPA guidelines, an EIR/EIS must disclose what it reasonably can (CEQA Guidelines, Section 15144; NEPA Regulations, 40 C.F.R. 1502.15 and 40 C.F.R. 1502.22). However, considerable, repeated efforts were made to obtain permission to access private property, and surveys were performed on all properties where permission for access was affirmatively granted. As discussed in Section 3.7.4.5 of this Final EIR/EIS, during the botanical surveys, protected trees in the study area were identified based on the regulations summarized in Appendix B of the BARTR (Authority 2018c). When permission to enter was granted, surveyors classified trees into species groups such as oak trees or Joshua trees. In areas where permission to enter was not granted, survey crews mapped these protected trees and "unknown" trees using aerial photographic interpretation and ArcGIS software.

To address information needs for areas where access was not granted, the Authority used habitat suitability models based on several databases, including the California Wildlife Habitat Relationship System, which assists in mapping habitat and land uses that are crossed with the species' known geographic range to determine suitable habitats for special-status wildlife species. This system is a widely used tool, and its approach assumes the presence of special-status wildlife species in areas where suitable habitat occurs (as identified in the California Wildlife Habitat Relationship System or other published agency literature). The California Wildlife Habitat Relationship approach is widely used in California on large infrastructure projects and other projects where permission to enter is limited, and it provides a reasonable and consistent approach to the assessment of potential for wildlife presence. It provides a reasonable and conservative basis for estimating potential impacts. The net result of the analysis included a very conservative approach that overestimated impacts on special-status plant communities, including Joshua tree and oak tree woodlands.

Impact BIO#3 of this Final EIR/EIS discusses the construction impacts on special-status plant communities, including oak woodland and Joshua tree woodland. As discussed

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-591

under Impact BIO #3, the impact on sensitive plant communities under CEQA would be potentially significant during construction. However, with implementation of BIO-MM#1, BIO-MM#6, BIO-MM#47, BIO-MM#50, BIO-MM#53, BIO-MM#54, BIO-MM#58, BIO-MM#61, and BIO-MM#75, impacts on sensitive plant communities would be reduced to a less-than-significant level.

The Authority agrees that all mitigation lands will be protected and managed in perpetuity; however, there is no requirement to identify the mitigation parcel in the CEQA document.

### 781-592

The commenter states that the CNDDDB query used for plant communities was outdated and that recommended mitigation measures may result in inadvertent take. The commenter requests updated surveys and data.

Although the Authority has updated various special-status species lists during the regulatory agency review process, original surveys and CNDDDB data collection were based on the project baseline, which is set when the Notice of Preparation for the EIR is filed.

As discussed in Section 3.7.4.5 of this Final EIR/EIS, surveys were conducted in areas with permission to enter according to the methods described in the California Native Plant Society Botanical Survey Guidelines (California Native Plant Society 2001), the Protocols for Surveying and Evaluating Impacts on Special-status Native Plant Populations and Natural Communities (CNPS 2009), Supplemental Survey Methods (Cypher 2002a–2002d), Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (USFWS 1996), and Survey Protocols Required for NEPA and Endangered Species Act Compliance for BLM Special-Status Plant Species (BLM 2009, 2010).

Botanical surveys were conducted in 2011, 2013, 2015, and 2016 in areas with permission to enter. In 2015, one botanical survey was conducted in the Special-Status Plant Study Area (250-foot buffer around the project footprint) between May 12 and June 11, 2015. Surveys on the portion of the alignment that travels through Tejon Ranch were conducted between March 15 and March 31, 2016. In 2011, botanical surveys were conducted in the biological study area in portions that overlapped earlier project designs during the early spring (March 22–26), late spring (April 26–May 5), and early summer bloom periods (June 1–3). Three survey periods were conducted: March 20–28, April 15–25, and May 28–June 1, 2013.

BIO-MM#1 requires presence/absence pre-construction surveys for special-status plant species and special-status plant communities. The surveys will be consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Plant Communities (CDFW 2018) and Guidelines for Conducting and Report Botanical Inventories for Federally Listed, Proposed, and

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-592

Candidate Plants (USFWS 2001). Additionally, as discussed under Impact BIO#1, BIO-MM#2, BIO-MM#38, BIO-MM#47, BIO-MM#50, BIO-MM#53, BIO-MM#55, BIO-MM#56, BIO-MM#58, BIO-MM#61, and BIO-MM#75 would provide for on-site and off-site habitat restoration and preservation of special-status plant species in an amount equivalent to or greater than the area affected by the project. Therefore, no substantial adverse effect would occur, either directly or through habitat modifications, on any special-status plant species. Additional information regarding mitigation measures that outline required surveys is located in Section 3.7.7 of this Final EIR/EIS.

### 781-593

The desert kit fox is not a special-status species, nor is it covered under any existing conservation plans. The desert kit fox is protected by C.C.R. Title 14, §460, and California Fish and Game Code Section 4000, which regulate the intentional taking of fur-bearing mammals. This discussion on desert kit fox can be found in Section 3.7.5.7 in this Final EIR/EIS. The desert kit fox was also specifically discussed in Section 6.3.2.8 of the Wildlife Corridor Assessment (Authority 2018c).

The IAMFs and mitigation measures have been developed to minimize effects on desert kit fox per the Fish and Game Code. The Authority does not anticipate take of the desert kit fox as defined by the Fish and Game Code.

### 781-594

The commenter requests mitigation measures and consultation with CDFW for mountain lion.

Refer to Responses to Comments 777-315(b) and 789-352, contained in Chapter 25 of this Final EIR/EIS.

The Authority recognizes that mountain lion is now a candidate for listing under CESA in a portion of this project section. The Authority addressed this change in the species' status in the Revised Draft EIR/Supplemental EIS published in February 2021.

The mountain lion was included in the EIR/EIS special-status (CDFW species of concern) mammal species analysis and was specifically analyzed for movement in the Wildlife Corridor Assessment (Authority 2018c) across the HSR alignment, the area that is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.4 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Sections 3.7.5.4 and 3.7.5.5 of this Final EIR/EIS lists special-status wildlife species Table 3.7-7 in the Final EIR/EIS has been updated to include this species and impacts on its habitat.

### 781-595

The commenter noted that mitigation measures involving species relocations would require an Incidental Take Permit when the species is state-listed under CESA and could not be authorized for fully protected species.

The Authority concurs with this statement.



## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-596

The commenter states that there are potential conflicts with conservation plans and easements that have not been analyzed.

Potential conflicts with conservation plans and easements have been analyzed. Table 3.7-1 of this Final EIR/EIS identifies the consistency of the project with regional and local policies regarding biological resources. For additional discussion, refer to Appendix 2-H of this Final EIR/EIS and Section 7.8 of the BARTR (Authority 2018c).

### 781-597

The commenter expresses concerns that the project has been characterized as a “narrow linear project,” as well as concerns regarding habitat impact mitigation by county and mitigation ratios not being adequate. By definition, the project is in fact a narrow, linear project, but as the commenter points out, it is also a large and complex project, crossing counties, landscapes, and habitats.

The Authority intends to design and construct the HSR project in the least impactful way possible and still meet the HSR project objectives outlined in Chapter 1, Purpose, Needs, and Objectives. Additionally, extensive environmental analysis of impacts on biological resources is discussed in Section 3.7, Biological and Aquatic Resources, in this Final EIR/EIS and includes mitigation measures to reduce adverse impacts on biological resources wherever possible.

The Authority has reviewed the potential conservation areas within CDFW Region 4 (Kern County) and Region 5 (Los Angeles County) per the information submitted by CDFW in June 2017. The Authority will continue to look for appropriate mitigation areas in coordination with CDFW.

In response, the compensatory habitat mitigation ratios in the Draft EIR/EIS, and supporting documents, are variable, ranging from 0.5:1 to 3:1, depending on the type and quality of the affected habitat. Furthermore, the ratios specified in the Draft EIR/EIS are minimums and may be higher depending on the requirements of other permitting agencies, especially the wildlife agencies.

The Authority acknowledges that mitigation ratios and/or other measures for CESA-listed species will need to meet the full mitigation requirement pursuant to Section 2081(b)(2) of the Fish and Game Code, the details of which will be determined through the Incidental Take Permit process.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-598

The commenter recommends that protocol-level surveys be conducted for Nelson's antelope squirrel and Tipton kangaroo rat prior to ground-disturbing activities. The commenter also notes that handling of state-listed species requires an Incidental Take Permit.

The Authority concurs with the comment. BIO-MM#22, included in Section 3.7.7.2 of this Final EIR/EIS, indicates the pre-construction surveys "will be conducted in accordance with any required protocols." The Authority acknowledges that an Incidental Take Permit would be required for handling of state-listed species, including Nelson's antelope squirrel and Tipton kangaroo rat.

### 781-599

The commenter states that pre-construction surveys should be conducted to establish areas of bat occupancy the year prior to the start of construction and lists recommended survey protocol related to the timing and data collection associated with these surveys.

BIO-MM#22, included in Section 3.7.7.2 of this Final EIR/EIS, specifies that visual and acoustic surveys for roosting bats be conducted in the work area and extending 500 feet from the boundary of the work area. The measure indicates minimum requirements associated with the timing and duration (i.e., no earlier than 30 days prior to the start of ground-disturbing activities, and surveys conducted over the course of 1 day and 1 evening, at a minimum). The Authority has determined that the "no earlier than 30 days" timing and minimum 1 day and 1 evening duration specified by this measure are sufficient to identify any roosting bats, including active hibernacula or maternity roosts, in advance of project activities and to allow for the effective implementation of any subsequent protective and relocation measures. If roosting bats are identified during the pre-construction surveys, BIO-MM#26 and BIO-MM#27—which specify bat avoidance, relocation, and exclusion measures—will be implemented. The pre-construction surveys will be conducted by a qualified biologist consistent with standard protocol for bat surveys (e.g., inspection of bat sign, use of bat detectors, documentation of roost type and location, observation of exit and entrance points) similar to those specified by the commenter.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-600

The commenter requests that the Authority implement bat avoidance measures.

BIO-MM#26 has been revised to include additional avoidance and minimization measures.

### **BIO-MM#26**

Prior to any ground-disturbing activity, the Project Biologist shall survey for active hibernacula or maternity roosts. If active hibernacula or maternity roosts are identified in the Work Area or 500 feet extending from the Work Area during pre-construction surveys, they will be avoided to the extent feasible. Clearing and grubbing will be prohibited adjacent to the roost site. Lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost will also be prohibited. Operation of internal combustion equipment, such as generators, pumps and vehicles shall be prohibited within 300 feet of the roost site.

If avoidance of a hibernacula is not feasible, through coordination with CDFW, portions of the features that provide naturalized habitat will be maintained to the greatest extent possible. In addition, improvements will be made to existing roost sites and/or new roost sites on buildings or within the project site area will be provided. New roosts will be in place prior to the initiation of project-related activities to allow enough time for bats to relocate.

Additionally, if avoidance of a hibernacula is not feasible, the Project Biologist will prepare a relocation plan to remove the hibernacula and provide for construction of an alternative bat roost outside of the Work Area. The relocation plan will be submitted to CDFW for review prior to construction activities.

The Project Biologist will implement the relocation plan before the commencement of any ground disturbing activities that will occur within 500 feet of the hibernacula. Removal of roosts will be guided by accepted exclusion and deterrent techniques.

This mitigation measure is anticipated to be effective because it avoids (to the extent feasible) and monitors active bat roosts (hibernation and nursery) within and immediately adjacent to the proposed construction area to avoid impacts from

### 781-600

construction activities, requires preparation of a Bat Roost Relocation Plan before construction disturbance; and removes roosts before the hibernation period and after young are volant to avoid bat mortality from construction activities. The avoidance, relocation plan, seasonal restrictions on roost removal, and roost removal prevent construction activities from disturbing active bat roosts, allowing young to develop and bats to vacate the project footprint and immediately adjacent areas prior to construction disturbance. Implementation of this measure would not trigger secondary environmental impacts because it would not change the scope, scale, or location of construction activities beyond those that have been described as part of the B-P Build Alternatives.

### 781-601

The commenter requests that a roosting bat relocation plan be submitted to CDFW for review.

The requested change to BIO-MM#26 has been made. Refer to Response to Comment 781-600, contained in this chapter.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-602

The commenter expresses concern regarding mitigation that could be considered for ringtail cats. Refer to Response to Comment 781-595, contained in this chapter. Mitigation Measures BIO-MM#8, BIO-MM#16, BIO-MM#17, BIO-MM#18 and BIO-MM#22 in this Final EIR/EIS are designed to avoid take of state fully protected species. Specifically, BIO-MM#22 states, "Any State or Federally listed wildlife species detected within the footprint during ground disturbing activities would be relocated by the Project Biologist in accordance with agency guidance, as approved by the USFWS and/or CDFW (or other jurisdictional agencies-e.g., U.S. Forest Service), or in certain circumstances, it may require that they be allowed to leave the work zone on their own (such as with CDFW Fully-Protected species)."

Ringtail cats will not be captured or handled.

### 781-603

The analysis of floodplain impacts in Section 3.8, Hydrology and Water Resources, of this Final EIR/EIS considered impacts on floodplain functions and values. As discussed in Section 3.8.5.7 in Section 3.8, Hydrology and Water Resources, natural and beneficial floodplain functions and values for floodplains in the resource study area include natural moderation of floods; floodwater retention; nutrient cycling, sediment capture, and associated water quality benefits; groundwater recharge; wildlife and plant habitat; wildlife movement; open space; agricultural use; and natural beauty. As discussed in Impact HWR #5 in Section 3.8.5.6, the existing floodplain functions and values would generally be retained, although the distribution of the functions and values may shift due to localized hydrologic changes in the vicinity of the HSR alignment. Although there may be a localized shift in floodplain functions and values, these changes would be negligible outside of the project footprint.

### 781-604

The resource study area included seeps and springs; impacts on these resources were addressed in Section 3.8.6.3 under Impact HWR #4 and Impact HWR #8. The description of the resource study area in Section 3.8.4.1, Study Area for Analysis, of the Final EIR/EIS was revised to clarify that seeps and springs are included in the resource study area.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-605

The potential for tunneling to intercept subsurface flow that feeds springs and seeps is discussed under Impact HWR #4 in Section 3.8.6.3 in Section 3.8, Hydrology and Water Resources of the Final EIR/EIS. As discussed in Section 3.8.6.3, in limited reaches, tunnel construction may interfere with the groundwater flow systems which could result in the loss or reduction in water available to streams, seeps, springs, and water supply wells. Change in groundwater flow has the potential to result in desiccation (i.e., drying out) of aquatic resources (including springs, seeps, streams and associated habitat), which in turn could result in impacts on associated special-status species habitat. The locations of the seeps and springs relative to the tunnel alignment were evaluated. It was determined that there are two locations where seeps and springs are located within 0.3 mile of the proposed tunnels (at tunnel 8) where tunnel construction may interfere with the flow systems that supply water to these resources. The discussion of potential hydrologic effects on seeps and springs was expanded in Section 3.8.6.3 to detail the changes in groundwater that would occur, which may affect aquatic habitats that support fish, wildlife, and plant species. In addition, evaluation and discussions of impacts on springs and seeps from tunneling construction have been added to Section 3.7 in several locations addressing potential indirect temporary impacts on special-status plant species, plant communities, wildlife species (specifically amphibians, reptiles, birds, and mammals), aquatic resources, and protected trees.

As discussed in Section 3.8.7.2, Mitigation Measure WQ-MM#3 would reduce impacts related to groundwater (including subsurface flow that feeds seeps and springs) during construction. As specified in WQ-MM#3, the tunnels would be designed as waterproofed or watertight, depending on the degree of groundwater protection needed. In areas with high groundwater pressure, the tunnel lining system would be designed to allow controlled drainage of water from around the tunnel lining. The rate of groundwater losses would be minimized by grouting the native rock to lower its hydraulic conductivity immediately around the tunnel lining. Design of the tunnels would reduce the amount of seepage into tunnels in areas of high groundwater pressure, reducing the potential for adverse impacts to occur on surface resources (i.e., seeps, springs, and wells) that rely on groundwater.

WQ-MM#3 also requires groundwater levels, flow, and quality to be monitored at domestic wells, springs, and seeps prior to, during, and after construction. Regular

### 781-605

monitoring would indicate potential changes in the depth to groundwater beyond the expected seasonal variations. Depending on the collected monitoring data, corrective actions would be implemented to minimize impacts on groundwater, including seeps and springs. WQ-MM#3 was expanded to provide additional details of the Groundwater Adaptive Management and Monitoring Program (AMMP) that would be implemented to reduce potential impacts on springs and seeps if tunneling disrupts groundwater flow to these resources. The AMMP would specify requirements for baseline data collection, groundwater modeling, monitoring during and after construction, adaptive management triggers and required remedial actions (such as augmenting water supplies to affected seeps and springs). The AMMP would advance a flexible strategy to respond to monitoring information that indicates changes to groundwater conditions resulting from project activities. If monitoring demonstrates that adaptive management actions taken to address such changes are not achieving the intended outcomes, management actions will be modified, or other strategies implemented to meet the objectives of minimizing impacts on water resources supported by groundwater resources.

### 781-606

Refer to Response to Comment 781-605, contained in this chapter. Discussion of impacts on groundwater flow that could express on the surface as springs and seeps was expanded under Impact HWR #4 and Impact HWR #8 in Section 3.8.6.3. Text was also added to Section 3.8.4.3, Methods for NEPA and CEQA Impact Analysis, of this Final EIR/EIS to clarify that impacts on seeps and springs from groundwater changes during tunneling were analyzed. In addition, evaluation and discussions of impacts on springs and seeps from tunneling construction have been added to Section 3.7 in several locations addressing potential indirect temporary impacts on special-status plant species, plant communities, wildlife species (specifically amphibians, reptiles, birds, and mammals), aquatic resources and protected trees.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-607

Refer to Response to Comment 781-605, contained in this chapter. The potential for the tunnel to disrupt groundwater flow patterns was expanded under Impact HWR #4 in Section 3.8.6.3. As acknowledged in this section, tunnel construction may interfere with the groundwater flow systems, which could result in the loss or reduction in water available to streams, seeps, springs, and water supply wells. Change in groundwater flow has the potential to result in desiccation (i.e., drying out) of aquatic resources (including springs, seeps, streams and associated habitat), which in turn could result in impacts on associated special-status species habitat. As concluded in Impact HWR #4 in Section 3.8.6.3, prior to implementation of mitigation, the impact on groundwater systems, including seeps and springs, would be potentially significant pursuant to CEQA. Mitigation Measure WQ-MM#3 would reduce impacts related to groundwater (including subsurface flow that feeds seeps and springs). WQ-MM#3 requires groundwater levels, flow, and quality to be monitored at domestic wells, springs, and seeps prior to, during, and after construction. Regular monitoring would indicate potential changes in the depth to groundwater beyond the expected seasonal variations. Depending on the collected monitoring data, corrective actions would be implemented to minimize impacts on groundwater, including seeps and springs. Monitoring of groundwater, if affected, and implementation of corrective actions would continue until the groundwater system has normalized to pre-construction conditions. WQ-MM#3 was expanded to provide additional details of the Groundwater AMMP that would be implemented to reduce potential impacts on springs and seeps if tunneling disrupts groundwater flow to these resources. The AMMP would specify requirements for baseline data collection, groundwater modeling, monitoring during and after construction, and adaptive management triggers and required remedial actions (such as augmenting water supplies to affected seeps and springs). Implementation of WQ-MM#3 would minimize impacts to groundwater flow systems, including seeps and springs. Text was added to Impact HWR #8 in Section 3.8.6.3 to clarify that no permanent impacts to hydrologic conditions would occur.

### 781-608

The commenter references the updated Redacted Revised Draft Final BARTR (November 2018) and states that pages 6-3 through 6-21 appear to be missing.

Pages 6-3 through 6-21 from the Revised Draft Final BARTR (Authority 2018c) were redacted as they contain confidential information. The Authority provided CDFW a non-redacted version of the Revised Draft Final BARTR and its TRS in December 2019 after receipt of similar comments by CDFW following their review of the Draft EIR/EIS during the cooperating/responsible agency review. No revisions have been made to the Final EIR/EIS in response to this comment.

### 781-609

The commenter suggests that the Draft EIR/EIS does not contain the suggested updated hydrology reports to reflect wet conditions resulting from the 2017 rainy season and does not contain updated vegetation surveys to better capture on-site vegetation resulting from the 2017 rainy season.

Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS summarizes the findings of the detailed analyses of the project as provided in the updated Hydrology and Water Resources Technical Report (Authority 2018d). The updated Hydrology and Water Resources Technical Report was made available to the public upon request during the Draft EIR/EIS public review period. As explained in Response to Comment 840-951, contained in Chapter 21 of this Final EIR/EIS, precipitation did not pose limitations on vegetation surveys as winter rainfall in 2014, 2015, and 2016 was sufficient to promote growth of annual vegetation. Additionally, BIO-MM#1 requires presence/absence pre-construction surveys for special-status plant species and special-status plant communities. The surveys will be consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Plant Communities (CDFW 2018) and Guidelines for Conducting and Report Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2001). Additional information regarding mitigation measures that outline required surveys is located in Section 3.7.7, Mitigation Measures, of this Final EIR/EIS. No revisions have been made to the Final EIR/EIS in response to this comment.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-610

The commenter suggests that the Draft EIR/EIS fails to utilize a range of estimates for acreage of impacts to allow for variability in conditions and limited accuracy due to incomplete survey data.

Section 3.7.4, Methods for Evaluating Impacts, of the Draft EIR/EIS discusses the methods used for evaluating impacts. The impact analysis takes into account all potentially suitable habitat for each species within the resource study area. The various study areas, as described in Section 3.7.4.1, Study Area for Analysis, use a conservative approach and acreages evaluated are the high end of the range used. Specific to potential Section 1600 resources, Table 4-1 in Appendix 3.7-B, Additional Potential Section 1600 Resources Memorandum, of the EIR/EIS present the range of possible interpretations of CDFW Section 1600 jurisdiction, as estimated by 1) the Authority and reported in the ARDR and BARTR and 2) utilizing CDFW's data sets and conservative methodology. These results are provided in Table 3.7-10 of the EIR/EIS and the upper range of estimated impacts was conservatively evaluated to ensure that project impacts to all potential Section 1600 resources were analyzed in Section 3.7, Biological and Aquatic Resources. No revisions have been made to the Final EIR/EIS in response to this comment.

### 781-611

The commenter states that the aquatic delineation may have underrepresented aquatic resources and that impacts on state jurisdictional features are likely underestimated. The Authority believes it properly and adequately mapped the extent of state jurisdictional features, including California Fish and Game Code (Cal. Fish and Game Code) Section 1600 resources, as reported in its BARTR (Authority 2018c) with Technical Report Supplement (TRS) (Authority 2020) and ARDR (Authority 2016). Likewise, the Authority believes it has properly mapped the extent of all other aquatic resources, including state waters, as those areas are depicted in the BARTR and ARDR. However, during the Authority's consultation with CDFW regarding California Fish and Game Code Section 1600 resources, CDFW provided shapefiles to the Authority in 2017 describing additional areas between historic Lake Thompson (2 miles north of the Los Angeles County line) and Palmdale that could contain features subject to CDFW's jurisdiction and requested that the Authority further evaluate those areas and provide additional information related to the remainder of the project section. The Authority continued to consult with CDFW to identify potential additional Section 1600 resources that may be present in the project section's Aquatic Resource Study Area (project footprint plus a 250-foot buffer). Based on those meetings and the information provided by CDFW, including the shapefiles and datasets, the Authority estimated potential additional Section 1600 jurisdictional resources between the Bakersfield Station and historic Lake Thompson (i.e., the portion of the project section not covered by CDFW's shapefiles or data sets). To ensure that project impacts on all potential aquatic resources were evaluated, the Draft EIR/EIS included the Authority's mapped Section 1600 delineation results and an estimate of CDFW's potential extent of Section 1600 jurisdiction in the Aquatic Resource Study Area, based on the agency's interpretation and the datasets it provided in 2017. A technical memorandum summarizing the results was prepared and sent to CDFW Region 4 and Region 5 in December 2019, attached to an advance version of the Draft EIR/EIS (Volume 2, Appendix 3.7-B: Potential Additional Section 1600 Resources Memorandum), and summarized in the TRS attached to the BARTR, which was sent to CDFW Regions 4 and 5 in March 2020 during their review of the Draft EIR/EIS. The memorandum summarized the methodology the Authority used to estimate additional potential features that may be regulated by CDFW under Section 1600 of the California Fish and Game Code and also summarized potential permanent and temporary impacts on the additional potential Section 1600 jurisdictional areas for the entire project section by

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-611

alternative, as well as for the Authority's mapped Section 1600 resources provided in the BARTR and its TRS and the ARDR. These results were incorporated into the Draft EIR/EIS for evaluation (Volume 1, Section 3.7, Biological and Aquatic Resources, Section 3.7.5.8, Aquatic and California Fish and Game Code Section 1600 et seq. Resources, and Section 3.7.6.4, Construction Impacts—Biological Resource Impacts Common to All Bakersfield to Palmdale Project Section Build Alternatives). Although the comment does not identify any specific features that are not included in the BARTR, the Authority re-reviewed state and federal data sets to determine whether any potential features were not included. Although agencies are not required to continuously update the information in an EIR/EIS after the environmental review process has commenced, the Final EIR/EIS was updated to include the most recent data available, including 2020 data from the National Wetlands Inventory and National Hydrography Dataset to provide an even more conservative assessment of potential Section 1600 Resources.

As discussed in Chapter 2, Alternatives, and analyzed in Section 3.7, Biological and Aquatic Resources, and Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS, tunnels, elevated structures (e.g., bridges, viaducts), stormwater culverts, and drainage ditches have been incorporated into the project design to maintain hydrologic connectivity, functionality, and value. Additionally, design refinements were incorporated into the project plans following public circulation of the Draft EIR/EIS in response to comments from agencies and stakeholders and to further avoid or minimize environmental impacts. A design improvement was introduced that allowed for the installation of rock slope protection at drainage outlets and at expanded drainage basins to help attenuate downstream hydraulic impacts and reduce potential impacts. The rock slope protection would be placed at the downstream ends of culverts to dissipate energy from the concentrated stormwater flows prior to releasing to drainages crossing the HSR alignment in order to reduce erosion and downstream impacts. The larger drainage basins would capture, retain, and treat stormwater before the flow is released downstream at a rate that mimics the existing flow rates and volumes. Incorporation of these larger drainage basins reduces downstream impacts associated with increased flows and pollutants. Similarly, refinements to the typical cross-section were made to allow for drainage ditches and maintenance access which also serve as a design improvement to attenuate downstream hydraulic impacts.

### 781-611

### 781-612

The commenter indicates that the Palmdale Station should be moved to avoid and reduce potential impacts on Una Lake and state-listed species. The Preferred Alternative terminates in Palmdale, over 0.5 mile north of Una Lake. Therefore, the Preferred Alternative, including the Palmdale Station, does not affect Una Lake. Avoidance and minimization of impacts on Una Lake and state-listed species that may occupy the area are addressed in the Palmdale to Burbank Project Section EIR/EIS. Avoidance and minimization of impacts on aquatic resources and state-listed species for the Bakersfield to Palmdale Project Section are discussed in Section 3.7, Biological and Aquatic Resources. No revisions have been made to this Final EIR/EIS in response to this comment.

### 781-613

The commenter does not agree that the low probability of occurrence concluded for southwestern willow flycatcher also applies to willow flycatcher and little willow flycatcher.

A review of the CNDDDB (CDFW 2016) and other sources show that the known geographic range of the southwestern willow flycatcher overlaps the resource study area, although there have been no CNDDDB occurrences within the resource study area and none were seen during the 2011 habitat assessment. Willow flycatchers are common in the region during migration (eBird), and virtually all of these are believed to be little willow flycatchers (*Empidonax traillii brewsteri*), rather than southwestern willow flycatchers. Based on this information, the Authority reaffirms its original conclusion of a low probability for willow flycatcher habitat. Section 3.7, Table 3.7-7, of this Final EIR/EIS displays the results of the habitat species modeling used to address potential impacts on federally and state-listed species.



## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-614

The commenter suggests that probability of occurrence for least Bell's vireo (*Vireo bellii pusillus*) should be identified as at least moderate. Table 3.7-7 in this Final EIR/EIS shows the impacts for the species that were evaluated by alternative and includes moderate potential suitable habitat and potentially suitable habitat.

The least Bell's vireo surveys conducted and recorded in the BARTR, which is the technical document for Section 3.7 of the EIR/EIS, determined that no occurrences were within the biological study area (Authority 2018c), and no least Bell's vireos were observed during the 2011 habitat assessment. Least Bell's vireo observations in the Antelope Valley are well removed from the alignment (greater than 1 mile) and in habitat quite different from that along the alignment. Therefore, the species is considered to have a low probability of being present in suitable portions of the biological study area. Although the probability is considered low for this species to occur within the resource study area, if special-status species are encountered during construction, the Authority will consult with CDFW to determine the appropriate course of action.

### 781-615

The commenter agrees with the conclusion that California legless lizard habitat exists within the resource study area and recommends that any proposed IAMFs for this species should avoid impacts on this species to the maximum extent practicable and include pre-construction surveys for nesting.

BIO-MM#7 and BIO-MM#8 in Section 3.7.7.2 of this Final EIR/EIS include pre-construction surveys and avoidance measures for Special-Status Reptile and Amphibian Species, which would include California legless lizard.

### 781-616

The commenter recommends reconsidering the discussion in the BARTR relative to the range for western pond turtle.

Refer to Response to Comment 781-588, contained in this chapter.

### 781-617

The commenter agrees with the conclusion that mountain plover habitat exists within the resource study area and recommends that any proposed IAMFs for this species should avoid impacts on this species to the maximum extent practicable and include pre-construction surveys for nesting birds. The EIR/EIS includes BIO-IAMF#12, Design the Project to Be Bird Safe, BIO-MM#14, Conduct Pre-construction Surveys and Delineate Active Nest Exclusion Areas for Breeding Birds, and BIO-MM#74, Implement Bird Nest and Avian Special Status Species Avoidance Measures for Helicopter-Based Construction Activities, which when implemented would reduce impacts on mountain plover to a less-than-significant level.

### 781-618

The commenter requests language regarding mitigation land for burrowing owl. Refer to Response to Comment 781-577. BIO-MM#44 and BIO-MM#50 are specific to compensatory mitigation for burrowing owls and off-site mitigation and are discussed in Section 3.7.7.2 of this Final EIR/EIS.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-619

The commenter recommends initiating construction outside the nesting season for birds and following CDFW monitoring guidelines so as not to violate the Migratory Bird Treaty Act.

The Authority has mitigation measures in place as identified in Section 3.7.7 of the Final EIR/EIS to ensure compliance with the Migratory Bird Treaty Act.

### 781-620

The commenter states the requirements for notification under Section 1602 of the Fish and Game Code. The description of the requirements for Section 1602 notification set forth in the Final EIR/EIS is consistent with the comment. No revisions have been made to this Final EIR/EIS in response to this comment.

### 781-621

The commenter states that aquatic features may be underrepresented in the aquatic delineation and recommends additional delineation work and analysis of impacts on upstream/downstream resources and hydrologic connectivity. The Authority believes it properly and adequately mapped the extent of California Fish and Game Code Section 1600 resources, as reported in its BARTR (Authority 2018c) with TRS (Authority 2020) and ARDR (Authority 2016). Likewise, the Authority believes it properly mapped the extent of all other aquatic resources, including state waters, as those areas are depicted in the BARTR and ARDR. However, to ensure that project impacts on all potential aquatic resources were evaluated, the Draft EIR/EIS included the Authority's mapped Section 1600 delineation results and an estimate of CDFW's potential extent of Section 1600 jurisdiction in the Aquatic Resource Study Area (project footprint plus a 250-foot buffer), based on the agency's interpretation and the data sets it provided in 2017 during the Authority's consultation with CDFW regarding California Fish and Game Code Section 1600 resources. CDFW provided data sets and mapping of additional potential features for the southern extent of the project section, limited primarily to the Los Angeles County subset of the Bakersfield to Palmdale Project Section; CDFW did not provide similar mapped data sets for the remainder of the project section. Therefore, the Authority estimated additional potential resources for the Kern County subset of the Bakersfield to Palmdale Project Section that may fall under Section 1600 jurisdiction, based on CDFW's comments and data methodology for the Los Angeles County area. A technical memorandum summarizing the results was prepared and sent to CDFW Region 4 and Region 5 in December 2019, attached to an advance version of the Draft EIR/EIS (Volume 2, Appendix 3.7-B Potential Additional Section 1600 Resources Memorandum), and summarized in the TRS attached to the BARTR, which was sent to CDFW Regions 4 and 5 in March 2020 during their review of the Draft EIR/EIS. The memorandum provided a summary of the methodology the Authority used to estimate additional potential features that may be regulated by CDFW under Section 1600 of the California Fish and Game Code and also summarized potential permanent and temporary impacts on the additional potential Section 1600 jurisdictional areas for the entire project section by alternative, as well as for the Authority's mapped Section 1600 resources provided in the BARTR and its TRS and the ARDR. These results were incorporated into the Draft EIR/EIS for evaluation (Volume 1, Section 3.7, Biological and Aquatic Resources, Section 3.7.5.8, Aquatic and California Fish and Game Code Section 1600 et seq. Resources, and Section 3.7.6.4, Construction Impacts—Biological

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-621

Resource Impacts Common to All Bakersfield to Palmdale Project Section Build Alternatives). These results were updated in the Final EIR/EIS through incorporation of updated and rereleased information, specifically the National Wetlands Inventory and National Hydrography Dataset. The results include claypans, as CDFW has indicated that claypans with connectivity to riparian/streambed areas may fall under Section 1600 jurisdiction, and these areas were included in CDFW's shapefiles.

As discussed in Chapter 2, Alternatives, and analyzed in Section 3.7, Biological and Aquatic Resources, and Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS, tunnels, elevated structures (e.g., bridges, viaducts), stormwater culverts, and drainage ditches have been incorporated into the project design to maintain hydrologic connectivity. Additionally, design refinements were incorporated into the project plans following public circulation of the Draft EIR/EIS in response to comments from agencies and stakeholders and to further avoid or minimize environmental impacts. A design improvement was introduced that allowed for the installation of rock slope protection at drainage outlets and at expanded drainage basins to help attenuate downstream hydraulic impacts and reduce potential impacts. The rock slope protection would be placed at the downstream ends of culverts to dissipate energy from the concentrated stormwater flows prior to releasing to drainages crossing the HSR alignment in order to reduce erosion and downstream impacts. The larger drainage basins would capture, retain, and treat stormwater before the flow is released downstream at a rate that mimics the existing flow rates and volumes. Incorporation of these larger drainage basins reduces downstream impacts associated with increased flows and pollutants. Similarly, refinements to the typical cross-section were made to allow for drainage ditches and maintenance access which also serve as a design improvement to attenuate downstream hydraulic impacts.

### 781-622

The commenter indicates that the definition of "stream" used in the Draft EIR/EIS does not encompass all streams that may be affected by the project and expresses concern that aquatic features may be underrepresented and that subsequent CEQA analysis may be necessary for issuance of a CDFW agreement. During the Authority's consultation with CDFW regarding California Fish and Game Code Section 1600 resources, CDFW provided shapefiles to the Authority in 2017 describing additional areas between historic Lake Thompson (2 miles north of the Los Angeles County line) and Palmdale that could contain features subject to CDFW's jurisdiction and requested that the Authority further evaluate those areas and provide additional information related to the remainder of the project section. The Authority continued to consult with CDFW to identify potential additional Section 1600 resources that may be present in the project section's Aquatic Resource Study Area (project footprint plus a 250-foot buffer). Based on those meetings and the information provided by CDFW, including the shapefiles and data sets, the Authority estimated potential additional jurisdictional resources between the Bakersfield Station and historic Lake Thompson (i.e., the portion of the project section not covered by CDFW's shapefiles or data sets). A technical memorandum summarizing the results was prepared and sent to CDFW Region 4 and Region 5 in December 2019, attached to the Draft EIR/EIS (Volume 2, Appendix 3.7-B: Potential Additional Section 1600 Resources Memorandum), and summarized in the TRS (Authority 2020) attached to the BARTR (Authority 2018c), which was sent to CDFW Regions 4 and 5 in March 2020 during their review of the Draft EIR/EIS. The memorandum summarized the methodology the Authority used to estimate additional potential features that may be regulated by CDFW under Section 1600 of the California Fish and Game Code and also summarized potential permanent and temporary impacts on the additional potential Section 1600 jurisdictional areas for the entire project section by alternative, as well as for the Authority's mapped Section 1600 resources provided in the BARTR and its TRS (Authority 2020) and ARDR (Authority 2016). These results were incorporated into the Draft EIR/EIS for evaluation (Volume 1, Section 3.7, Biological and Aquatic Resources, Section 3.7.5.8, Aquatic and California Fish and Game Code Section 1600 et seq. Resources, and Section 3.7.6.4, Construction Impacts—Biological Resource Impacts Common to All Bakersfield to Palmdale Project Section Build Alternatives). These results were updated in the Final EIR/EIS through incorporation of updated and rereleased information, specifically the National Wetlands Inventory and National Hydrography Dataset. The Authority believes it properly and

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-622

adequately mapped the extent of California Fish and Game Code Section 1600 resources as reported in the BARTR and its TRS and the ARDR, but the EIR/EIS analyzed a much larger range of potential Section 1600 resources to provide a conservative analysis. Likewise, the Authority believes it has properly mapped the extent of all other aquatic resources, including state waters, as those areas are depicted in the BARTR and its TRS and the ARDR. Section 3.7, Biological and Aquatic Resources, of the EIR/EIS analyzed the project's potential effect on both the Section 1600 resources estimated in the Authority's BARTR and ARDR and those suggested by CDFW as potential additional Section 1600 resources.

The Authority expects to conduct additional field surveys to refine the extent of impacts to CDFW jurisdictional areas closer and prior to notifying under Section 1602 of the Fish and Game Code for a Lake and Streambed Alteration Agreement for the Bakersfield to Palmdale Project Section. However, for purposes of CEQA, Section 3.7, Biological and Aquatic Resources, of the EIR/EIS adequately analyzed impacts to Section 1600 resources based on California Fish and Game Code Section 1602, as well as other sensitive resources (e.g., special status species and their habitat) that would fall under CDFW's jurisdiction.

### 781-623

The commenter states that features to maintain hydrologic function and allow wildlife passage should be incorporated into the project. As discussed in Chapter 2, Alternatives; Section 3.7, Biological and Aquatic Resources; and Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS, tunnels, elevated structures (e.g., bridges, viaducts), stormwater culverts, and drainage ditches have been incorporated into the project design to allow water flow and wildlife movement across the project alignment. As discussed in Section 3.8.6.3, Bakersfield to Palmdale Project Section Build Alternatives, the proposed drainage system would collect, convey, and discharge surface water runoff from the track right-of-way through a network of channels, ditches, and culverts while maintaining the existing drainage pattern to the maximum extent practicable. Culverts would be designed to meet FEMA and local agency design standards and to maintain hydraulic conveyance capacity to pass the 100-year flood without raising the existing water surface elevation by more than 1 foot, as required by FEMA. Culverts would range in size from relatively small-diameter pipe (ranging from 3 to 6 feet) to large, pre-cast, concrete-box structures with maximum dimensions of 10x10 feet.

Design refinements were incorporated into the project plans following public circulation of the Draft EIR/EIS in response to comments from agencies and stakeholders and to further avoid or minimize environmental impacts. A design improvement was introduced that allowed for the installation of rock slope protection at drainage outlets and expanded drainage basins to help attenuate downstream hydraulic impacts and reduce potential impacts. The rock slope protection would be placed at the downstream ends of culverts to dissipate energy from the concentrated stormwater flows prior to releasing to drainages crossing the HSR alignment in order to reduce erosion and downstream impacts. The larger drainage basins would capture, retain, and treat stormwater before the flow is released downstream at a rate that mimics the existing flow rates and volumes. Incorporation of these larger drainage basins reduces downstream impacts associated with increased flows and pollutants. Similarly, refinements to the typical cross-section were made to allow for drainage ditches and maintenance access which also serve as a design improvement to attenuate downstream hydraulic impacts.

As discussed in Section 3.7.5.9, Habitats of Concern, and Section 3.7.6.4, Construction Impacts—Biological Resource Impacts Common to All Bakersfield to Palmdale Project

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-623

Section Build Alternatives, the project incorporates tunnels, bridges, and viaducts to allow wildlife to freely move over or under the alignment. In addition, the design incorporates wildlife crossings along surface track to maintain wildlife movement. These wildlife crossings include small undercrossings (6-foot arch), medium undercrossings (10-foot arch), dual-use road over- and undercrossings, dual-use drainage overcrossings, and overcrossings.

### 781-624

The commenter expresses concern that final design refinements may eliminate viaduct and tunnel sections, making them impermeable to wildlife movement. The commenter suggests the criterion that permeable sections of the project cannot be changed to be less permeable by the design-build contractor. The commenter suggests that at-grade embankment segments should be analyzed as a barrier to movement, gene flow, reproductive success, and loss of colonization opportunities, and to discuss this in the context of planned wildlife crossings. The commenter also provided recommendations for wildlife crossing design features, including track station surveys, ditch and canal crossing surveys, monitoring trails with infrared or Trail master cameras, and GIS habitat modeling to identify likely wildlife travel corridors and anthropogenic barriers. Other wildlife crossing design features were also recommended.

Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 9 tunnels of varying length located throughout the project. Additional detail about the 53 viaduct openings and the 9 tunnel openings between the fenced surface rail segments is provided in Table 2-1 of the Wildlife Corridor Assessment (Authority 2018c). The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet). Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. The additional wildlife crossings are designed to provide additional opportunities across at-grade surface segments. These crossings in the project design are expected to maintain genetic connectivity for numerous plant and animal species, including the mountain lion.

Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#5, BIO-IAMF#8, BIO-MM#37, BIO-MM#42, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-624

less-than-significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less-than-significant level through protection of those habitat linkages.

As final design develops, the Authority will continue to coordinate with CDFW to ensure adequate wildlife crossings are available throughout the project.

### 781-625

The commenter expresses concerns about cumulative impacts on biological resources. The commenter states that the cumulative project list is outdated and recommends that the Authority consider referencing updated sources for all approved and future projects, such as the Xpress West high-speed train project.

Cumulative biological impacts, including habitat fragmentation, degradation, habitat loss, and potential loss of individuals to the population, are discussed in Section 3.19.5.7 of this Final EIR/EIS. The analysis concludes that construction of the proposed improvements within the Bakersfield to Palmdale Project Section and cumulative projects, including but not limited to other linear projects, would result in a less than significant cumulative impact on wildlife movement corridors because construction activities would be short-term and mitigated as required based on environmental review. Additionally, incorporation of project design features and mitigation measures such as wildlife-crossing features would facilitate wildlife movement and minimize or avoid impacts on wildlife movement corridors over the long term.

Refer to Response to Comment 759-287, contained in Chapter 22 of this Final EIR/EIS, for a discussion of the projects included on the cumulative project list and what is considered a reasonably foreseeable project for this analysis. Xpress West was not included in the cumulative project list because it is a proposed HSR system that would link Las Vegas to Victorville and is not in the vicinity of the Bakersfield to Palmdale Project Section. However, the High Desert Corridor train, which would link to the California HSR System in Palmdale is included as a reasonably foreseeable project in Appendix 3.19-A and the analysis in Section 3.19, Cumulative Impacts. No revisions have been made to the Final EIR/EIS in response to this comment.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-626

The commenter expresses reservation regarding exclusive use of modeling methods for the Incidental Take Permit issuance process. The base modeling data used for the LPA model was from South Coast Wildlands Missing Linkage project to be consistent with the parameters of the previously established resolution for the focal species used. The various modeling methods employed for the biological analysis are described in Section 3.7.4.3 of this Final EIR/EIS and Section 6.3.4 of the BARTR (Authority 2018c). The detailed methods, analysis, and results of the modeling effort are provided in Section 5.2, Section 6.3.4, and Appendix C of the BARTR, respectively. The Authority acknowledges that CDFW will require additional detail, including surveys in some cases, for its Incidental Take Permit issuance process. In addition, surveys and construction monitoring throughout potential endangered species habitat will occur prior to and during construction to ensure that the amount of actual incidental take is consistent with the incidental take authorization (i.e., Incidental Take Permit).

### 781-627

The commenter notes that pre-construction surveys are not equivalent to protocol surveys.

The Authority agrees there is a difference between pre-construction surveys and protocol surveys. Mitigation measures identified in Section 3.7.7 of this Final EIR/EIS identify both pre-construction surveys and protocol surveys for various species.

### 781-628

The commenter expresses concern regarding the application of modeling results for the development of compensatory mitigation.

As discussed in Sections 3.7.7.1 and 3.7.7.2 of this Final EIR/EIS, specific species mitigation measures will provide data from pre-construction and protocol surveys to supplement the modeling for the compensatory mitigation plans as identified in BIO-MM#47: Prepare and Implement a Compensatory Mitigation Plan (CMP) for Impacts to Aquatic Resources and BIO-MM#53: Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat. These mitigation measures provide the factors needed for identifying suitable compensatory mitigation.

### 781-629

The commenter discusses CEQA requirements and requests the reporting of species found during surveys to CNDDDB for addition to the database.

The Authority appreciates the provided information and will comply with CEQA policies and report biological data per the commenter's request.

### 781-630

The commenter discusses the requirement of assessment of filing fees if biological impacts are determined.

The Authority appreciates the provided information and will comply CDFW fee requirements, if applicable.

## Response to Submission 781 (Janice Yoshioka, California Department of Fish and Wildlife, Region 4, April 28, 2020) - Continued

### 781-631

The commenter provides information regarding surveys and monitoring protocols available on the CDFW website.

The Authority appreciates the provided information and will comply with surveys and monitoring protocols available on the CDFW website, iasf appropriate.



# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Govin Newsom, Governor

**Bakersfield - Palmdale - RECORD #792 DETAIL**

**Status :** Action Pending  
**Record Date :** 4/30/2020  
**Affiliation Type :** State Agency  
**Submission Date :** 4/28/2020  
**Interest As :** State Agency  
**Submission Method :** Project Email  
**First Name :** Harpreet@DOT  
**Last Name :** Kooner  
**Professional Title :** Program/Project Management  
**Business/Organization :** California Department of Transportation  
**Address :** 2015 E. Shields Ave  
**Apt./Suite No. :** Suite 100  
**City :** Fresno  
**State :** CA  
**Zip Code :** 93726  
**Telephone :** 559-472-3326  
**Email :** Harpreet.Kooner@dot.ca.gov  
**Cell Phone :**  
**Email Subscription :**  
**Add to Mailing List :**  
**EIR/EIS Comment :** Yes  
**Attachments :** DOT\_Letter.pdf (1 mb)

**Stakeholder Comments/Issues :**  
 Please see the attached letter and detailed comments from District 6 regarding the Draft EIR/EIS for the Bakersfield to Palmdale Section.

If you have any questions or need additional information, please email at Harpreet.kooner@dot.ca.gov<mailto:Harpreet.kooner@dot.ca.gov>  
 Regards,

Harpreet Kooner  
 California Department of Transportation  
 Program/Project Management  
 2015 E. Shields Ave, Suite 100  
 Harpreet.kooner@dot.ca.gov<mailto:Harpreet.kooner@dot.ca.gov>  
 559-472-3326

**DEPARTMENT OF TRANSPORTATION  
 DISTRICT 6**  
 2015 EAST SHIELDS AVENUE, SUITE A-100  
 FRESNO, CA 93726-5428  
 PHONE (559) 243-8012  
 FAX (559) 243-3426  
 TTY 711  
 www.dot.ca.gov



Making Conservation a California Way of Life.

Date: April 28, 2020

California High-Speed Rail Authority  
 770 L Street, Suite 620 MS-1  
 Sacramento, CA 95814

Attn: Draft EIR/EIS for the Bakersfield to Palmdale Project Section

The California Department of Transportation (Caltrans) appreciates the opportunity to provide comments on the Bakersfield to Palmdale Project Section Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) as it pertains to the State Highway System (SHS).

792-498 | Caltrans has previously reviewed the administrative Draft EIR/EIS and submitted comments to the California High-Speed Rail Authority (CHSRA) in a letter dated December 6, 2019 (attached). Caltrans has no additional comments and looks forward to a continued partnership with the CHSRA in assisting with the delivery of this High-Speed Rail (HSR) project.

If you have any questions or need additional information, feel free to call me at (559) 243-8012

Sincerely,

*Garth Fernandez*

Garth Fernandez, P.E., PMP  
 Sr. Transportation Engineer - Project Manager  
 District 6

Attachment: Detailed comments sheets

cc: Sharri Bender Ehlert, District 6 Director  
 Mike Whiteside, Assistant Chief Engineer  
 Diana Gomez, Central Valley Regional Director

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

**DEPARTMENT OF TRANSPORTATION  
DISTRICT 6**

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*Making Conservation  
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Mark A McLoughlin  
December 6, 2019  
Page 2

792-499

Date: December 6, 2019

California High-Speed Rail  
Bakersfield to Palmdale and Palmdale to Burbank  
Attn: Mark A McLoughlin  
355 S. Grand Avenue, Suite 2050  
Los Angeles, CA 90071

Dear Mr. McLoughlin:

RE: High Speed Rail Project - Bakersfield to Palmdale Section  
Administrative Draft Environmental Impact Report / Environmental Impact Statement

Thank you for the opportunity to review the Administrative Draft Environmental Impact Report / Environmental Impact Statement (ADEIR/EIS) for the Bakersfield to Palmdale Section of the High Speed Rail Project as it pertains to the State Highway System (SHS) within District 6.

Caltrans has reviewed the ADEIR/EIS and would like to bring to the CHSRA's attention the following key concerns:

1. The DEIR/EIS or subsequent re-examinations will need to sufficiently identify any site-specific impacts and mitigation measures for impacts that may occur within the SHS.
2. Based on the level of detail contained within the ADEIR/EIS, additional environmental studies may be required to be completed prior to Caltrans' issuance of an encroachment permit for construction activities within the SHS right-of-way. List of potential additional studies are included in the comments.

A spreadsheet containing detailed comments from this review is attached. Additionally, we have previously reviewed and provided comments on the draft plans in September 2019. These comments are still applicable and are attached for your reference.

Please recognize that our comments do not necessarily constitute approval for the concepts presented and a Project Report will be required to obtain Caltrans approval for modification to the SHS.

Caltrans is committed to partnering with the CHSRA and their consultant teams to determine the planned mitigation of impacts to the SHS. Caltrans team is looking forward to meeting with the CHSRA team to resolve these outstanding issues. We look forward to reviewing the revised plans based on these comments and any associated technical reports.

If you have any questions or need additional information, feel free to call me at (559) 243-8012

Sincerely,

A handwritten signature in blue ink, appearing to read "Garth Fernandez".

Garth Fernandez, P.E., PMP  
State Transportation Engineer - Project Manager  
District 6

Attachment: Detailed comments sheets  
Engineering Plan Comments, September 20, 2019

cc: Sharri Bender Ehlerl, District 6 Director  
Mike Whiteside, Assistant Chief Engineer  
Diana Gomez, Central Valley Regional Director

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to enhance California's economy and livability"*

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to enhance California's economy and livability"*

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
REVIEW DOCUMENT: 06-4HT00 HST BP SR-58 Coordination											
SUBMITTAL NUMBER: Dec-19											
REFERENCE			COMMENT				RESPONSE				Review (Concurred/Response to Explanation/Additional Comment)
BP SR-58 Coordination			Comment Codes: M=Major Comments; G=General Comment; N=Need Additional Information				Response Codes: A=Agree, will revise; D=Disagree, see explanation; F=Follow up required; G=General Response				
Mt No.	Cmt No.	Section	Page/Sht	Code	Description	Code	Explanation	Org	By	By	
<b>Traffic Operations</b>											
83	1	Interchanges	General		Follow Traffic Operations Policy Directive 13-02, Intersection Control Evaluation (ICE), to identify effective intersection traffic control strategy at the proposed ramp termini.	WY					
84	2		General		Provide Transportation Technical Report for review	WY					
85	3		CV-R1006		Provide truck turning exhibit for review. Provide SBR and NBR lanes at the intersection of "MRNG" and "MR2" and "MR3". Verify CSD. Ultimate facility of SR 184 is 6C. Will the design be compatible with the UTC facility?	WY					
86	4		CV-R1400/CV-R1405/		Will the tight diamond (I-1) proposed adequate to accommodate future traffic demand?	WY					
87	5		CV-R1409		Follow Ramp Metering Development Plan for the ramp metering requirement for the on ramps.	WY					
88	6		CV-R1445		It appears location of the column in the median will prohibit future widening.	WY					
89	7	Transportation Technical Report			Obtain concurrence from the Office of Technical Planning in regards to the 2040 forecast volume at the impacted Interchanges along SR 58. (S. Edison, Commanche, Towerline)	WY					
90	8	Transportation Technical Report			HDM 303.2 Design period - new facility should be based on estimated traffic 20 years after completed construction. Hence the future year should be 2049 instead of 2040.	WY					
91	9	Transportation Technical Report			At the WB ramp terminus of the three interchanges along SR 58, will the proposed design be able to accommodate Roundabout footprint or two NB left turn lanes?	WY					
92	10	Transportation Technical Report			Provide an exclusive NBL turn lane at the WB terminus of the Commanche Road /SR 58 interchange.	WY					
93	11		CV-R1012		The grade of the overcrossing at the WB terminus should not exceed 2% for the potential future roundabout alternative. And the grade should not exceed 4% to avoid overturning trucks.	WY					
94	12		CV-R1150		Will the design be able to accommodate SB to EB loop on ramp?	WY					

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
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Mt No.	Cmt No.	Section	Page/Sht	Code	Description	Code	Explanation	Org	By	By	
<b>Technical Planning</b>											
95	1	General			Active Transportation needs to be considered and included where applicable at all locations where improvements to the State Highway System are proposed.	EO					
96	2	General			Traffic Studies need to be provided for final approvals of improvements to facilities connected to the State Highway System.	EO					
97	3	General			High Speed Rail facilities need to meet horizontal clearance requirements as described in Section 309.1(4) of the Highway Design Manual (e.g. sheets ST-11039 to ST-11049).	EO					
98	4	BP_PEPD_Roadway_EIREIS_2019-04-25	CV-R1006		Please provide cross section for Edison Hwy at Morning Dr intersection that will accommodate future UTC 6-lane conventional highway for SR 184.	EO					
99	5	BP_PEPD_Roadway_EIREIS_2019-04-25			No drawings provided for Edison Road IC for Alternative 2. Proximity of Alt 2 alignment will cause need for improvements to the IC.	EO					
100	6	BP_PEPD_Roadway_EIREIS_2019-04-25			No drawings provided for Commanche Drive IC for Alternative 2. Proximity of Alt 2 alignment will cause need for improvements to the IC.	EO					
<b>Environmental</b>											

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
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BP SR-58 Coordination			Comment Codes: M=Major Comments; G=General Comment; N=Need Additional Information				Response Codes: A=Agree, will revise; D=Disagree, see explanation; F=Follow up required; G=General Response				
Mit No.	Cmt No.	Section	Page/Sht	Code	Description	Code	Explanation	Org	By		By
100				G	Cultural and Paleontological Resources: Where Programmatic Agreements (PA) and Memorandum of Agreements (MOA) apply, all requirements outlined in the PA and/or MOA when they are being used to comply with CEQA and California state laws and regulations for work within the SHS must be completed and available for Caltrans' review if potential is identified for archaeological and/or paleontological resources to be unearthed during construction, standard specifications for work required to address these resources in construction (such as monitoring) should be included in the Plans and Specifications package.	RS					
101				G	Biological Resources: Any Biological Opinion (BO) or biological permits pertaining to work within the SHS that are being used to comply with CEQA and California state laws and regulations must be issued and valid and available for Caltrans' review. Corresponding site-specific details must be highlighted during the encroachment permit process with standard specifications included in the Plans and Specifications package to comply with any BO or biological permit requirements.	RS					
102				G	Preconstruction Surveys: Surveys for nesting birds may be required prior to nesting season and prior to the beginning of construction activities. Exclusionary measures may be required. Standard Specifications for preconstruction surveys and exclusionary measures for nesting birds should be included in the Plans and Specifications package submitted to Caltrans. If existing bridge structures in Caltrans' right-of-way are involved in the construction project, then preconstruction surveys are required to identify if nests from swallows or bats are present. Exclusionary measures may be required. Standard specifications for preconstruction surveys and exclusionary measures for nesting birds or bats on structures should be included in the Plans and Specifications package submitted to Caltrans.	RS					
103				G	Environmentally Sensitive Areas (ESA): Any ESA fencing and standard specifications for protection of species or sensitive areas should be identified on plans included in the Plans and Specifications package submitted to Caltrans.	RS					

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
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SUBMITTAL NUMBER: Dec-19											
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Mit No.	Cmt No.	Section	Page/Sht	Code	Description	Code	Explanation	Org	By		By
104				G	Hazardous Waste: Prior to incorporation of any right-of-way into Caltrans' SHS, properties to be acquired on behalf of Caltrans must be free of any contamination and comply with Chapter 18 of the Caltrans Project Development Procedures Manual as well as Chapter 400 of the Caltrans Encroachment Permit Manual. Hazardous waste clearance for properties must be conducted to meet Caltrans' standard HMDD (Hazardous Materials Disclosure Document) process before the property is transferred.	RS					
105				G	Soil Removal: Any soil removed from the SHS right-of-way would be subject to an Aerially Deposited Lead (ADL) study, and treatment of the soil would be determined by the study results. When an ADL study is required, review and approval of soil treatment by Caltrans is required. Standard specifications for treatment of the soil should be included in the Plans and Specifications package.	RS					
106				G	Imported Soil: Soil imported into Caltrans' right-of-way must meet Caltrans standards for importing clean soil. Standard specifications for borrow to meet clean standards should be included in the Plans and Specifications package.	RS					

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

## DEPARTMENT OF TRANSPORTATION DISTRICT 6

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Making Conservation  
a California Way of Life.

Mr. Rick Simon  
September 20, 2019  
Page 2

Attachment: Detailed comments sheets

cc: Sharri Bender Ehlert, District 6 Director  
Mike Whiteside, Assistant Chief Engineer  
Diana Gomez, Central Valley Regional Director

792-499

Date: September 20, 2019

California High-Speed Rail  
Bakersfield to Palmdale and Palmdale to Burbank  
Attn: Rick Simon  
355 S. Grand Avenue, Suite 2050  
Los Angeles, CA 90071

Dear Mr. Rick Simon:

RE: Bakersfield to Palmdale Section - Independent Quality Assurance review of the Engineering Plans

Thank you for the opportunity to review the Bakersfield to Palmdale Section Engineering Plans as they pertain to the State Highway System (SHS).

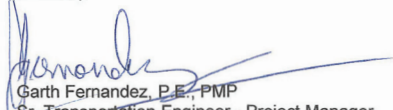
We reviewed this submittal considering the disposition of comments from our prior review of the draft engineering plans submitted to us for review in September 2016 and your proposed responses.

While some of those comments have been addressed others that were agreed to are not reflected in the latest plan set provided. Additionally, as indicated in the attached comments spreadsheet, several comments have not been satisfactorily addressed. Particularly, the comment that the proposed concepts shall not preclude Caltrans Ultimate Concept (UTC) facility throughout this corridor. We cannot accept the proposed response, "...improvements constrained by current environmental footprint limiting ultimate cross section." as a valid response to preclude our UTC facility. Additionally, please recognize that our comments at the various locations do not necessarily constitute approval for the concepts presented and a Project Report will be required to obtain Caltrans approval for modification to the SHS.

Caltrans is committed to partnering with the CHSRA and their consultant teams to determine the planned mitigation of impacts to the SHS. Caltrans team is looking forward to meeting with the CHSRA team to resolve these outstanding issues. We look forward to reviewing the revised plans based on these comments and any associated technical reports.

If you have any questions or need additional information, feel free to call me at (559) 243-8012

Sincerely,

  
Garth Fernandez, P.E., PMP  
Sr. Transportation Engineer - Project Manager  
District 6

"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"

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# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination											
SUBMITTAL NUMBER Aug-19											
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Alt No	Code	Section	Page/Sht	Code	Description	Code	Explanation	Org	By		
<b>Technical Planning</b>											
1	1	Mainline Section From Edison Rd to Towerline Rd	Alternative 1, 3, 5	M	The mainline within this section is shown to be realigned, however, the cross section shown needs to address the full standard section of the freeway. The Ultimate Route Concept will be provided to accommodate future 6F. The 6F consists of standard median, 4 lanes, 30 feet shoulders, 3 feet hinge joint, 4:1 slopes, drainage ditches with 10:1 slope and 15 feet of Maintenance access on each side. The shown cross sections are mission elements such as Maintenance access road and drainage ditches etc.	D	Disagree. Proposed mainline improvements constrained by current environmental footprint limiting ultimate cross section. If Alternative 1, 3, or 5 is selected, additional environmental footprint will be obtained to provide ultimate route concept for mainline improvements.			The Environmental Footprint is not a valid constraint to preclude the UTC. Please address the comment accordingly.	SPDV
2	2	Mainline Section From Edison Rd to Towerline Rd	Alternative 1, 3, 5	M	The mainline within this section is shown to be realigned and is require to show how maintenance access would be provided to maintain the slopes and drainage elements between the freeway and the CHRA ROW.	D	Disagree. Proposed mainline improvements constrained by current environmental footprint limiting ultimate cross section. If Alternative 1, 3, or 5 is selected, additional environmental footprint will be obtained to provide ultimate route concept for mainline improvements.			The Environmental Footprint is not a valid constraint to preclude the UTC. Please address the comment accordingly.	SPDV
3	3	Edison Road, Comanche Drive and Towerline Road Interchange	Alternative 1, 3, 5	M	This proposal precludes Caltrans from the UTC at these three interchanges. L9 interchange configuration would be the UTC. Caltrans suggestions to take out the freeway away from the CHRA alignment at these three interchanges to accommodate L9 in the EB direction as well. The footprint of the shown facilities would need to be revised.	A	Agree, will revise. Design revised to allow for L9 interchanges.			Comment has not been addressed.	SPDV
4	4	Edison Road, Comanche Drive and Towerline Road Interchange	Alternative 1, 3, 5	N	The Edison Road, Comanche Drive and Towerline Road undercrossings cross sections are required to understand the width available for future cross sections. Please provide adequate width for a future UTC-4 lane conventional highway cross section.	A	Agree, will revise. Structure spans have been increased to provide for ultimate roadway widths.			OK	SPDV
5	5	Edison Road Interchange	Alternative 1, 3, 5	M	A retaining wall is shown at the EB on-ramp. What is the constraint such that a retaining wall is required to understand the width available for future cross sections. Please provide adequate width for a future UTC-4 lane conventional highway cross section.	D	Disagree. Retaining wall required to contain grading improvements within the current environmental footprint. Additional footprint may be obtained to revise the grading to slopes in this area if required, after the Record PEFO.			The Environmental Footprint is not a valid constraint to preclude the UTC. Please address the comment accordingly.	SPDV

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
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REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Alt No	Code	Section	Page/Sht	Code	Description	Code	Explanation	Org	By		
6	6	Malaga Road & Tejon Hwy	Alternative 1, 3, 5	N	The Malaga Road and Tejon Hwy undercrossings cross sections are required to understand the width available for future cross sections. Please provide adequate width for a future 4 lane local road facility.	A	Agree, will revise. Structure spans have been increased to provide for ultimate roadway widths.			OK	SPDV
7	7	Edison Road Interchange	Alternative 2	M	CHRA alignment crosses the freeway within the interchange footprint. The interchange would have to be 8-ramp for interim widening and ultimate concept to understand and accommodate the IC. For example the slip on-ramps would be modified when L-9 configuration is entertained. The existing ramp would be designed as a spread diamond and would have to be accommodated. The loop ramps would have to be accommodated.	A	Agree, will revise. Design revised to allow for L9 interchanges.			Please provide UTC interchange layout with applicable sections (perpendicular to roadway alignment) at each hand to confirm - as requested.	SPDV
8	8	CHRA crossing 68B at Edison Road	Alternative 2	N	Please provide cross section of the freeway accommodating mainline UTC. Place the plans to accommodate the UTC of mainline and ramps. Provide specific cross section at each hand.	A	Agree, will revise. Design revised to allow for L9 interchanges. A typical cross section is provided for SR68 mainline and the local road crossing.			Please provide applicable sections (perpendicular to roadway alignment) at each hand to confirm - as requested.	SPDV
9	9	Edison, Malaga, Comanche, Tejon, Towerline undercrossings	Alternative 2	M	The undercrossings cross sections are required to understand the width available for future cross sections. Please provide adequate width for a future 4 lane local road facility and intersection accommodations. The UTC concept needs to be drawn to understand the cross section and provide appropriate corner site details.	A	Agree, will revise. Design revised to allow future 4-lane local road facilities.			OK	SPDV
10	10	Interchange at Comanche and Towerline Road	Alternative 2	M	The interchanges are constrained due to close proximity of CHRA alignment. The EB off and on ramps are supported by retaining walls and precludes Caltrans from future widening and interchange modifications. Please use appropriate measures to mitigate the impacts to the interchanges.	A	Agree, will revise. Design revised to relocate retaining walls outside Caltrans ROW and allow for future ramp widening.			Comment has not been addressed. Cross sections have not been provided.	SPDV

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale										
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination										
SUBMITTAL NUMBER Aug-19										
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)	
Alt No.	Chg No.	Section	Page/SH	Code	Description	Code	Explanation	Chg	By	
11	11	Mainline Section From Edison Rd to Towerline Rd	Alternative 2	M	Similar comment as 1 and 2 for this alternative (A1 - 2)	A	Agree. will revise. No proposed modifications to SR68 however CHSR design accommodate future SR68 mainline widening. Sections CT-83010 and CT-83013 have been revised to include future SR68 facilities.			OK for mainline SPDV
12	12	Mainline north of Towerline Road	Alternative 2	N	Please provide cross section of the freeway accommodating mainline LTC. Provide specific cross section at each bent perpendicular to SR58. Please note that the LTC at this section is 6-Aux Lanes.	A	Agree. will revise. Cross section (Elevation: STA 17752+00 on sheet CT-83014 provided to show SR58 embankment at CHSR east of Towerline Road. SR58 LTC consists of BP through project limits as per the TCR, Section VII. Aux track climbing lanes are required between General Beale Rd and Beale Rd which is beyond the project limits.			Please provide LTC layout with applicable sections (perpendicular to roadway alignment) at each bent to confirm - as requested. SPDV
13	13	Fulton Road, Tegen Hwy, Towerline Rd Profile	CV #1002 & #1005 & #1006	M	When pedestrian access routes are contained within pedestrian street crossings, the grade of the pedestrian route shall be 5.0% maximum. (08 62.05, 4.3.4 (1))	D	Disagree. Roadway profiles constrained by environmental footprint limits preventing grade changes at this time. Additional environmental footprint area may be added where required after Record PEFO submission. Please note comment refers to pedestrian street crossing not sidewalk. Pedestrian access routes along roadway profiles would comply with 08 62.05 4.3.4(2) which states pedestrian access routes shall not exceed the general grade established for the adjacent street.			OK for pedestrian grade SPDV

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale										
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Alt No.	Chg No.	Section	Page/SH	Code	Description	Code	Explanation	Chg	By	
14	14	Mainline	CV-81403	M	At approximate station 95+00 (CHSR 17385+00), the mainline cross section is already not to standard. In addition, a retaining wall at this location does not appear to make sense. The department would like to have a full standard cross section with adequate right of way width.	D	Disagree. Retaining wall required to contain grading improvements within the current environmental footprint. Additional footprint may be obtained to revise the grading to slopes in this area if required, after the Record PEFO.			The Environmental Footprint is not a valid constraint. Please address the comment accordingly. SPDV
15	15	Mainline	CV-81403	M	Please verify the stopping sight distance at curve #8 for existing and ultimate facility.	A	Agree. Stopping sight distance is 345-ft @ design Speed of 75mph with the 30-ft clear distance provided.			OK SPDV
16	16	Broome Road IC	Broome Road LC & Ramps	M	The ramps at Broome Road appear to be short. The placement of CHSR straddle berms is required to consider future standardization of the interchange and ramps.	A	Agree. will revise. The CHSR design has been revised to accommodate future split ramp improvements at Broome Rd by others.			Please provide sections (perpendicular to roadway) at each bent. SPDV
17	17	Marcel Area OH	Marcel Area OH	M	For the ultimate configuration/cross sections shown, please consider sight distances at the retaining walls and barrier due to proposed curves. Please check the sight distance and verify feasibility of the cross sections.	A	Agree. will revise. Designs revised to provide sight distance.			Please provide sight distances as requested. SPDV
18	18	Marcel Area OH	Section 83006	M	The section shows future widening to the outside, the department would prefer 4-lane facility with future widening accommodated to the median.	D	Disagree. Existing SR58 median width is 22-ft in this area which precludes widening ultimate to inside and maintaining LTC median width. Propose future widening to outside.			OK SPDV

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
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REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	City No	Section	Page/SH	Code	Description	Code	Explanation	Chg	By		
19	19	Marcel Area OH	Section B3006	M	The section shows straddle berms and future widening of the deck, please verify that the straddle berms are feasible with future widening or the straddle berms and foundation will be designed for median widening. Please use the structural system that is compatible with future widening as the life expectancy of CHSA structures is 100 years.	A	Agree, will revise. Proposed structure, including straddle berms, will be built to accommodate UTC.			OK	SPDV
20	20	Marcel Area OH	Marcel Area OH	N	Please provide drainage concept at this location. The existing topography and right corridor with retaining walls may require a basin facility to be considered.	A	Agree, will revise. Drainage concept design is provided at this location. Base sheets CV-24400 & CV-24401. Drainage designs will continue to be provided as environmental footprint is modified.			OK	SPDV
21	21	CV-R1445 and R1448	Alt 1, 2, 3, 5	M	The retaining wall proposed approaching "EB" of the bridge and on east of the overhead structure need to be designed to accommodate UTC, please provide cross sections showing UTC.	A	Agree, will revise. Retaining walls revised to accommodate UTC.			Comment not addressed. See CT. B3007	SPDV
22	22	CV-R1445 and R1448	Alt 1, 2, 3, 5	M	The concept shows straddle berms, please verify that the straddle berms are feasible with future widening or the straddle berms and foundation will be designed for median widening. Please use the structural system that is compatible with future widening as the life expectancy of CHSA structures is 100 years.	A	Agree, will revise. Proposed structure will be built to accommodate UTC.			OK	SPDV

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination											
SUBMITTAL NUMBER Aug-19											
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	City No	Section	Page/SH	Code	Description	Code	Explanation	Chg	By		
23	23	CV-R1445 and R1448	Alt 1, 2, 3, 5	M	The curve radius 1 and 2 on this sheet appear to be low value, please verify and check design speed and sight distances.	A	Agree, will revise. Curve radii increased to provide 800-ft sight distance and design speed of 65 mph.			OK	SPDV
<b>Traffic Operations</b>											
24	1			N	Will there be any impact to SR 184?	G	Yes. SR 184 (Morning Drive) designs have been included with the revised plans set.			OK	SPDV
25	3			G	Any modification of the interchange need to be substantiated with traffic study. Forecast volume need to be reviewed and concurred by Office of Technical planning.	G	Traffic studies to be prepared with future engineering documents.			Applicable traffic studies are to be included in the Environmental Document.	SPDV
26	1		CV-R1002 and CV-R1009 CV-R3900	N	What is the corner sight distance at both EB and WB terminus?	G	Sight distance is greater than the required 495-ft.			Corner sight distance requirements have been revised. See December 14, 2018 edition of HCM, Section 465.1. Please confirm updated standard is satisfied.	SPDV
27	4		CV-R1002 and CV-R1009 CV-R3900	G	It is noted that if the length of the ramp exceeds 1000 feet, an additional lane should be provided to allow passing maneuvers.	A	Agree, will revise. Ramp over 1,000 feet in length have been revised to 2 lanes. See sheets CV-R1400-1410.			OK	SPDV



# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale											
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination											
SUBMITTAL NUMBER Aug-19											
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)			
Alt. No.	Code	Section	Page/Sht	Description	Code	Explanation	Chg	By			
<b>Storm Water</b>											
28	1	Alternative 1.3.5	G	Storm Water Data Report has to be prepared for SR 58 realignment section and for every section of Caltrans ROW where HSR is crossing Caltrans ROW. District 7 has to provide stormwater and hydraulics comments for their section.	A	Agree. will revise. Storm Water Data Reports will be included with the Project Report.			OK	SPDV	
29	2	Alternative 1.3.5	G	How will drainage look like for all local roads underpassing in SR 58 realignment section. All new impervious area on SR 58 will need to provide stormwater treatment, even in hilly areas. Please make sure that there is enough right of way.	A	Storm water treatment basins provided for the local road crossings and the SPDS which can be accommodated within the environmental footprints. Drainage designs will continue to evolve as environmental footprint is modified.			Basins and pumps stations yet to be shown on plans.	SPDV	
<b>Landscape Architecture</b>											
30	1			Has a Visual Study been completed for this project?	G	Yes. A final aesthetic/visual impacts technical report will be included with the environmental impact report.			OK	SPDV	
31	2			Will Aesthetics or Architectural Treatments be added to the structures or any paving?	G	YES. A final aesthetic/visual impacts technical report will be included with the environmental impact report.			OK	SPDV	
32	3			Will any vegetation need to be removed?	G	Yes, existing vegetation will be removed with proposed improvements. Landscape plans to be prepared by DB contractor.			OK	SPDV	
<b>Pavement Design/ Materials Engineering</b>											
33	1	Typical Cross Sections	CT-83001	G	The Design parameters should be shown on CT-8 3021 ( First Typical Cross Sections Sheet)	D	Pavement structural section thickness shall be designed and provided by DB contractor.			OK	SPDV
34	2	Typical Cross Sections	CT-83001-CT83011	G	The structural section thicknesses for the road way within the state right of way should be designed in accordance with section 400 of Highway Design Manual.	D	Pavement structural section thickness shall be designed and provided by DB contractor.			OK	SPDV
35	3	Typical Cross Sections	CT-83001-CT83011	G	All Structural Section thicknesses needed to be shown on typical cross sections at the later stage of the project.	D	Pavement structural section thickness shall be designed and provided by DB contractor.			OK	SPDV
36	4			Prefer to use Rubberized Hot Mix Asphalt as a top surface layer in all pavement section design if flexible pavement is selected as pavement design.	G	Pavement structural sections to be designed by DB contractor.			OK	SPDV	

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PROJECT 06-4HT00 HST Bakersfield to Palmdale										
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination										
SUBMITTAL NUMBER Aug-19										
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Alt. No.	Code	Section	Page/Sht	Description	Code	Explanation	Chg	By		
<b>Hydraulics</b>										
37	1	Plans	G	Route 58 in this area is serviced by drainage basins adjacent to the roadway. Relocating the roadway will require new basins. The new basins will likely require more area than the existing due to new requirements. The primary access to the new basins will need to be from a public street or an easement.	A	Agree. Preliminary design includes areas for drainage facilities, including drainage basins, within the environmental footprint. Drainage designs will continue to evolve as environmental footprint is modified.			Basins and pumps stations yet to be shown on plans.	SPDV
38	2	Plans	G	Provisions to perpetuate the existing drainage patterns will be necessary. Easements may be required.	A	Agree. Preliminary design account for existing drainage patterns. Potential easements and additional right-of-way are identified in preliminary design. Drainage designs will continue to evolve as environmental footprint is modified.			OK	SPDV
39	3	Plans	G	There are numerous undercrossing that may require pumping plants with additional drainage basins.	A	Agree. Preliminary design includes storm water pump stations and drainage basins. Drainage designs will continue to evolve as environmental footprint is modified.			Basins and pumps stations yet to be shown on plans.	SPDV
40	4	Plans	G	The mountainous realignment will require drainage facilities to mitigate for quantity and quality additional light of way may be needed	A	Agree. Preliminary design includes drainage facilities to mitigate storm water within proposed right-of-way limits. Drainage design will continue to evolve as environmental footprint is modified.			OK	SPDV

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale REVIEW DOCUMENT 06-4HT00 HST BP SR-08 Coordination SUBMITTAL NUMBER Aug-19										
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	Code	Section	Page/Sht	Description	Response Code: A=Agree, will revise; D=Disagree, see explanation; F=Follow up required; G=General Comment	Code	Explanation	Org	By	
<b>Structure Construction</b>										
41	1	Edison Alt 1, 3, 5	4 and 5	G	Drawing shows HSR at higher elevation than highway, where and how will runoff be collected?	A	Agree, will revise. CHSR drainage will be collected and maintained within CHSR ROW with ditches.			OK SPDV
42	2	Bealville	29	G	Who will own and maintain the new RW shown along HSR ROW?	A	Agree, will revise. ROWs to be updated and labeled to clarify. CHSR will own and maintain its ROW.			OK SPDV
43	3	Typical Wall Section	ST-G1003	G	Need to confirm application of soil nail (passive restraint) system is the best method for holding embankment at this location. Need to check to see if active restraint based gravity of SR 98	A	Retaining wall design has been revised.			OPEN SPDV
44	4	Browne Rd	31	G	If within CT ROW, then CT standards and procedures apply including type selection.	G	Notice. Structures will comply with CT Standards. Type selection reports to be prepared by DB contractor.			OK SPDV
45	5	SR-58 Marcell Area	32, 83005	G	Who will own and maintain the new RW shown along HSR ROW?	A	Agree, will revise. ROWs to be updated and labeled to clarify ownership. CHSR will own and maintain its ROW.			OK SPDV
46	6	SR-58 Marcell Area	33, 83006	G	Is proposal to build bridges to ultimate width? Bridge as shown with outrigger and with outrigger beam to top of deck will be extremely difficult to construct later. See girder shown will also require framework for widening which may reduce vertical clearance shown. May also affect grading & bonding paragraph. This situation, whenever it occurs, requires additional attention.	G	Yes, ultimate structure to be constructed during initial construction.			OK SPDV

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PROJECT 06-4HT00 HST Bakersfield to Palmdale REVIEW DOCUMENT 06-4HT00 HST BP SR-08 Coordination SUBMITTAL NUMBER Aug-19										
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	Code	Section	Page/Sht	Description	Response Code: A=Agree, will revise; D=Disagree, see explanation; F=Follow up required; G=General Comment	Code	Explanation	Org	By	
47	7	Cable Area	35	G	If within CT ROW, then CT standards and procedures apply including type selection.	G	Notice. Structures will comply with CT Standards. Type selection reports to be prepared by DB contractor.			OK SPDV
48	8		ST-11039 (8 others)	G	If within CT ROW, then CT standards and procedures apply including type selection.	G	Notice. Structures will comply with CT Standards. Type selection reports to be prepared by DB contractor.			OK SPDV
49	9	Tehachapi	51	G	If within CT ROW, then CT standards and procedures apply including type selection.	G	Notice. Structures will comply with CT Standards. Type selection reports to be prepared by DB contractor.			OK SPDV
<b>Environmental</b>										
50	1			G	All proposed work must be covered under the environmental document for this segment or a re-exam prior to the approval of any project report. Also, an environmental certification and NOD will be needed prior to the approval of any interconnect points.	G	Environmental documents are being prepared for environmental certification and NOD.			OK SPDV
<b>Design</b>										
51	1			N	Provide cross sections, profiles, and super-elevation diagrams for each roadway alignment	A	Agree, will revise. Cross sections and profiles are provided. Super-elevation diagrams to be provided by DB contractor with GAD drawings.			OK SPDV
52	2			N	Provide completed DM 78-03 DESIGN CHECKLIST.	A	Agree, will be provided with GAD drawings.			OK SPDV
53	3			N	Provide a list of all design features and elements which deviate from Mandatory Standards (see NDM Table 62.24) and Advisory Design Standards (see NDM Table 62.28) for initial review and approval.	A	Agree. A list of all HDM design standards provided.			OK SPDV
54	4		CT-83002, CT-83002, CT-83002	M	Section B3002: Run off from CHSR R/W should not be allowed to flow down onto the shoulder of SR 58.	A	Agree, will revise. Drainage will be contained within CHSR ROW with ditches.			OK SPDV
55	5	Stevens Road, Comanche Drive and Tweedle Road Interchanges	Alternates 1,2,1,5	M	This comment is in conjunction with Technical Planning comments #5 and #7 in reference to future U9 interchange. Future loop entrance ramp configuration shall be consistent with NDM Figure 504.3C; future Regional entrance ramps shall be consistent with NDM Figure 504.3F. Please present variants which illustrate the proposed CHSR infrastructure will not preclude the U9 interchange configurations as noted.	A	Agree, will revise. Exhibits of future U9 configurations will be provided.			Comment not addressed SPDV

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

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PROJECT 06-40700 HST Bakersfield to Palmdale											
REVIEW DOCUMENT 06-40700 HST BP SR-58 Coordination											
SUBMITTAL NUMBER Aug-19											
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	City No	Section	Page/SH	Code	Description	Code	Explanation	Org	By		
56	6		TT-01100, TT-01110	M	Edison Rd Eastbound on-ramp: Remove bent columns from gore area due to concerns for sight distance and utility. See also Design comment #40 regarding future c-i interchange configuration.	A	Agree. CHSR support columns locations have been revised to allow for future L/R configurations.			Not clear if it will preclude this UTC. Please provide entire UTC interchange layout with applicable UTC cross sections.	SPDV
57	7	Edison Road, Taper Hill, Towerline Rd Profile	CV-R1002 & R1005 & R1080	M	This comment is in conjunction with Technical Planning comment #14: Ramp terminals should connect where the grade of the overcrossing is 4 percent or less to avoid potential overturning of trucks.	A	Agree, will revise roadway profiles within environmental footprint limits. Additional environmental footprint area may be added where required after Record PERC submittal. All undercrossing profiles were reviewed for comment compliance. Lower the CV-R1002 = WB ramp terminal correct at grade min 4%, however constrained by environmental footprint and cannot be raised at this time. The remaining ramp need percentage: Comanche Dr (CV-R1002) = All ramp terminals correct at less than 4%; Taper Hill (CV-R1005) = No ramp terminals; Towerline (CV-R1080) = All ramp terminals correct at less than 4%.			Edison WB Ramp OR/On Ramp terminal proposed grade is 5.89%. Towerline SR Ramp OR/On Ramp and WB Ramp OR/On terminals and proposed grades are 5.90% and 5.92%.	SPDV
58	8	Mainline	CV-R1410	G	As shown, there will be a nonstandard superelevation transition from curve #8 to the existing roadway (largest particularly in the WB direction). Consider reaching into the tangent further east to allow for the transition. Also, the proposed radius for curve #8 is 2,700 feet. The recommended minimum radii for freeways in rural areas is 3,000 feet (see HCM 2003.2, third paragraph).	D	Disagree. Proposed mainline improvements constrained by current environmental footprint. If Alternative 1, 3, or 5 is selected, additional environmental footprint will be obtained.			The Environmental Footprint is not a valid constraint. Please address the comment accordingly.	SPDV

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PROJECT 06-40700 HST Bakersfield to Palmdale											
REVIEW DOCUMENT 06-40700 HST BP SR-58 Coordination											
SUBMITTAL NUMBER Aug-19											
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)		
Mo No	City No	Section	Page/SH	Code	Description	Code	Explanation	Org	By		
59	9	Mainline	CV-R1410	M	Due to hydraulic concerns, avoid superelevation transitions on structures. See HCM 2003.9 for additional concerns regarding superelevation transitions on bridges.	D	Disagree. CHSR crosses California mainline at existing reversing curves and removing superelevations from structures results extreme skew with complex structures.			SR 58 bridge structure should be adjusted, must not have a super transition on the structure. This will create constructability and drainage issues.	SPDV
<b>Maintenance</b>											
60	1			G	On locations where signals and CMs are located, don't forget to add Maintenance Vehicle Pullout (MVP) lanes.	A	Agree, will revise. Existing Changeable Message Sign (CMS) located near SR58 STA 202+00 (CHSR STA 7862+00) to be relocated and Maintenance Vehicle Pullout provided at this location.			OK	SPDV
<b>HOV/ES Structure</b>											
61	1			G	IRMA/ASHTO have already adapted the MCD (Manual for Assessing Safety Hardware) which replaces the current NCHRP 350. In that the following barrier width should be assumed during planning phase when determining width of the structures: For solid concrete rails plan for barrier width of 1'-0" on the outside and post & beam barriers (steel or concrete) allow 2'-0" base width.	A	Agree, will revise. Sections revised to account for barriers widths provided.			OPEN	SPDV
62	2			G	Ensure location of all bridge substructures are in compliance with any alternate concept set forth by the (State and/or the County (i.e. at station 68+00+00, etc.))	A	Agree, will revise. Structures allow for future road widening.			OPEN	SPDV
63	3			F	Any possibility of removing the saddleback curve from Merced Area bridge over SR 258 by realigning SR 58 at that location also taking the sharp curve out of the SR alignment?	F	Please clarify comment.			OPEN	SPDV
64	4			G	All structure rene-round columns and piers best to orient the long face in the direction of the traffic.	D	Disagree. All proposed columns are non-eccentrically shaped.			OPEN	SPDV
65	5			G	Assess outriggers and C-bents when possible.	G	Noted. No C-bents are proposed.			OPEN	SPDV
66	6			G	Any recommendation out yet from the preliminary Geotech report as to the type of deep foundation? ( tying to deal with ground water during the construction?)	D	Disagree. No geotechnical information is available to assess foundation design or groundwater conditions. Geotechnical information to be provided during later engineering design phases.			OPEN	SPDV

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

792-499

PROJECT 06-4HT00 HST Bakersfield to Palmdale									
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination									
SUBMITTAL NUMBER Aug-19									
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)	
Alt No.	Code	Section	Page/Sht	Description	Code	Explanation	Orig	By	
<b>Traffic-Electrical</b>									
67	1			All existing ITS elements impacted by HSR alignment to be relocated or protected in place.	G	ITS designs to be provided by DB contractor			OK SPDV
<b>Traffic Management</b>									
68	1			Please provide TMP Data Sheet for our review when information becomes available.	A	Agree. The TMP Data Sheets will be included with the Project Report.			OK SPDV
69	2			0-6 boundary ends at Ker SR-PM 77.252.	G	Noted			OK SPDV
70	3			Any relocation of machine stems should not occur during construction.	G	Noted			OK SPDV
<b>Surveys</b>									
71	1	Station 1 Layout Sheet	Alternatives 1,1,5	Refer to Master Agreement for information to be provided for properties that will be incorporated into lot.	G	Noted			OK SPDV
<b>DRS</b>									
<b>Design</b>									
72	1	Typical Sections	CT-8301 CT-8302 CT-8310 CT-8313 CT-8306 CT-8307 CT-8308 CV-8301 CT-8309	The nearest fixed object or feature associated with the operation of the High Speed Rail facility should be located a minimum of 52 feet horizontally from the planned ultimate edge of traveled way, otherwise shielding must be provided.	SP/DV				
73	2	Typical Sections	CT-8301 CT-8302	include a minimum 18' distance from IP of SR 58 EB Off Ramp to CT 8306 for light grading.	SP/DV				
74	3	Plan and Profile	CV-8102 CV-8100	Verify that the minimum distance (curb return to curb return) between this ramp intersection and School St intersection is 400 feet, but preferred is 500 feet.	SP/DV				

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PROJECT 06-4HT00 HST Bakersfield to Palmdale									
REVIEW DOCUMENT 06-4HT00 HST BP SR-68 Coordination									
SUBMITTAL NUMBER Aug-19									
REFERENCE		COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)	
Alt No.	Code	Section	Page/Sht	Description	Code	Explanation	Orig	By	
<b>Traffic-Electrical</b>									
<b>Traffic Management</b>									
<b>Surveys</b>									
<b>DRS</b>									
<b>Design</b>									
75	4	Plan	CV-81400 CV-81402 CV-81405 CV-81408 CV-81410	At each on-ramp, procurement of additional right of way may be required for changes to ramp geometry to accommodate queue storage, installation of HOV preferential lanes, deployment of electrical and communication systems, and construction of CHP enforcement areas and MUPs, refer to DD-35-47. Provide long enough tangents to accommodate standard superelevation runoff, prefer 400' minimum, refer to 0602.205.4. "Two thirds of the superelevation runoff shall be on the tangent and one third within the curve". HCM Index 202.5. Angle of intersection at ramps and overcrossings shall be greater than 75 degrees, preferably 90 degrees, with adequate tangent length from the stop bar. If there are no constraints, a 4:1 side slope should be provided rather than the retaining wall shown on 102". Use STA as the design vehicle. Check all ramp termini intersections and provide truck turning templates.	SP/DV				
76	5	Plan	CV-81403	If there are no constraints, a 4:1 side slope should be provided rather than the retaining wall shown at around station "SR 58 95+00". Retaining walls create fixed objects.	SP/DV				
77	6	General	General	To accommodate future highway capacity need and minimize impact to the operations of the HST, overcrossing structures are the recommended solution at all intersections with the SRs.	SP/DV				
78	7	Plans	General	Pursuant to HCM 503.2, the geometric features of all interchanges or modifications to existing interchanges must be approved by the Caltrans Project Delivery Coordinator.	SP/DV				
79	8	Plans	Alt 1,1,5	Widening of the freeway should be to the outside to be consistent with the existing connection to the west with the median of 7' as shown on Alternative 2.	SP/DV				
<b>Hydraulics</b>									
80	1	General	Rta 58	The drainage design concept for the rural areas of Route 58 would entail sheet flow off the pavement into linear drainage ditches parallel and outside the roadway. Ditches should be designed to store the runoff generated from the ultimate design roadway section (5-lanes) from a ten year twenty four hour storm event. The maximum depth of the ditches should not exceed three feet and the calculations should not consider any storage within the median. The hydrological data can be found at <a href="http://hdrc.nrc.noaa.gov/hdr/jf6/">http://hdrc.nrc.noaa.gov/hdr/jf6/</a> .	TF				
81	2	At all depressed crossings		In some of the alternatives the local road is depressed below the original grade. Before this option is used all other options should be addressed. Depressed roadway require investigation of the depth to groundwater for both the roadway and the required drainage basin located outside of the State right of way. Long term maintenance and operation costs will need to be reviewed.	TF				
82	3	At all depressed crossings		All local roads appear to be depressed. Need location of proposed pump and drainage basin. Basin located outside access control with access from a local street.	TF				

# Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

PROJECT 06-40100 HST Bakersfield to Palmdale									
REVIEW DOCUMENT 06-40100 HST BP SR-68 Coordination									
SUBMITTAL NUMBER: Aug-19									
REFERENCE			COMMENT			RESPONSE			Review (Concurred/Response to Explanation/Additional Comment)
BP SR-68 Coordination			Comment Codes: M-Major Comments, G-General Comment, N-Need Additional Information			Response Codes: A=Agree, will revise; D=Disagree, see explanation; F=Follow as required; G=General Response			
Ref No	Code	Section	Page/Sheet	Code	Description	Code	Explanation	On/By	By
<b>Traffic Operations</b>									
06	1	Interchanges	General		Follow Traffic Operations Policy Directive 13-02, Intersection Control Evaluation (ICE), to identify effective intersection traffic control strategy at the proposed ramp termini.	yy			

## Response to Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020)

### 792-498

The commenter acknowledges that they have no comment on the Draft EIR/EIS at this time. The commenter has attached comments made on the Administrative Draft EIR/EIS. The Authority will continue to work closely with Caltrans on the Bakersfield to Palmdale Project Section of the HSR system.

### 792-499

The commenter has attached a 2019 letter and spreadsheet containing comments made during development of the Administrative Draft of the EIR/EIS. The attached letter suggested a potential need for additional detail about impacts on the State Highway System (SHS) prior to CalTrans' issuance of encroachment permits for construction within the SHS right of way. Additionally, the commenter (in the 2019 letter) stated that the Draft EIR/EIS would need to sufficiently identify site-specific impacts and mitigation measures for impacts that may occur within the SHS. Volume 3 of the Draft EIR/EIS and of this Final EIR/EIS include the design drawings depicting the various HSR crossings of SHS facilities, as listed in Appendix 2-A of this Final EIR/EIS. Furthermore, the EIR/EIS considers SHS facilities in Section 3.2 and includes consideration of the SHS within the impact discussions. This includes site-specific analysis.

Each numbered response listed below corresponds to the "Mtr No" in the table attached to Caltrans 2019 letter.

1. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
2. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
3. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
4. Caltrans accepted previously submitted response
5. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
6. Caltrans accepted previously submitted response
7. This file was provided to Caltrans April 2019, but not June 2019. File in "Other Related Files" folder on FTP.
8. This file was provided to Caltrans April 2019, but not June 2019. File in "Other Related Files" folder on FTP.
9. Caltrans accepted previously submitted response
10. We prepared graphics to show how L-9's could be built in the future. In the "Other Related Files" folder on FTP.
11. Caltrans accepted previously submitted response
12. We prepared graphics to show how L-9's could be built in the future. In the "Other

## Response to Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

### 792-499

- Related Files" folder on FTP.
13. Caltrans accepted previously submitted response
  14. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  15. Caltrans accepted previously submitted response
  16. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  17. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  18. Caltrans accepted previously submitted response
  19. In response to this comment, a straddle bent was added to the design of the HSR viaduct crossing back over State Route (SR) 58 from the south side to the north side. For further discussion of this design modification, refer to Appendix 3.1-B of this Final EIR/EIS.
  20. Caltrans accepted previously submitted response
  21. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  22. Caltrans accepted previously submitted response
  23. Caltrans accepted previously submitted response
  24. Caltrans accepted previously submitted response
  25. Caltrans accepted previously submitted response
  26. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  27. Caltrans accepted previously submitted response
  28. Caltrans accepted previously submitted response
  29. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
  30. Caltrans accepted previously submitted response
  31. Caltrans accepted previously submitted response
  32. Caltrans accepted previously submitted response
  33. Caltrans accepted previously submitted response
  34. Caltrans accepted previously submitted response
  35. Caltrans accepted previously submitted response
  36. Caltrans accepted previously submitted response

### 792-499

37. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
38. Caltrans accepted previously submitted response
39. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
40. Caltrans accepted previously submitted response
41. Caltrans accepted previously submitted response
42. Caltrans accepted previously submitted response
43. This is the wall at north portal Tunnel 4 and it is not a fill wall, it is a cut section.
44. Caltrans accepted previously submitted response
45. Caltrans accepted previously submitted response
46. Caltrans accepted previously submitted response
47. Caltrans accepted previously submitted response
48. Caltrans accepted previously submitted response
49. Caltrans accepted previously submitted response
50. Caltrans accepted previously submitted response
51. Caltrans accepted previously submitted response
52. Caltrans accepted previously submitted response
53. Caltrans accepted previously submitted response
54. Caltrans accepted previously submitted response
55. We prepared graphics to show how L-9's could be built in the future. In the "Other Related Files" folder on FTP
56. This file was provided to Caltrans April 2019, but not June 2019. File in "Other Related Files" folder on FTP.
57. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
58. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
59. These alternatives are not the Preferred Alternative; refined design details are not being advanced until after Environmental Document approval.
60. Caltrans accepted previously submitted response
61. This is a level of detail we do not do at this stage, but we have left the room required.
62. Need clarification as to why comment is still open

## Response to Submission 792 (Harpreet@DOT Kooner, California Department of Transportation, April 28, 2020) - Continued

### 792-499

63. This applies to the alignment that we are no longer carrying forward
64. Need clarification as to why comment is still open
65. Need clarification as to why comment is still open
66. Need clarification as to why comment is still open
67. Caltrans accepted previously submitted response
68. Caltrans accepted previously submitted response
69. Caltrans accepted previously submitted response
70. Caltrans accepted previously submitted response
71. Caltrans accepted previously submitted response
72. 52 feet minimum has been provided
73. This is not in the scope of HSR improvements
74. Minimum distance is verified at 400 feet
75. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
76. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
77. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document. Alt 1 is no longer being considered.
78. Will comply where applicable.
79. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document. If this comment pertains to another area, please specify.
80. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
81. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
82. Please clarify comment
83. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
84. The Transportation Technical Report was provided to Caltrans with the Draft EIR/EIS.
85. This is the Morning Drive Plan View; design has advanced since these comments were provided in December 2019.
86. Refined design details will be advanced on the Preferred Alternative after the

### 792-499

- approval of the Environmental Document.
87. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
88. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
89. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
90. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
91. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
92. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
93. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
94. Yes
95. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
96. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
97. Refined design details will be advanced on the Preferred Alternative after the approval of the Environmental Document.
98. This design will only be provided for interim condition
99. L-9 exhibit is available if not previously received.
100. No improvements to the existing interchange are required, except for a retaining wall adjacent to the ramp. A graphic showing an ultimate configuration of the interchange has been provided.
101. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
102. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.
103. The Authority intends to meet all Caltrans requirements, but much of the detailed design is outside the scope of this phase of the design.



# Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

**Bakersfield - Palmdale - RECORD #724 DETAIL**

**Status :** Action Pending  
**Record Date :** 4/17/2020  
**Response Requested :** Yes  
**Affiliation Type :** State Agency  
**Submission Date :** 4/14/2020  
**Interest As :** State Agency  
**Submission Method :** Project Email  
**First Name :** Vanessa  
**Last Name :** Velasco  
**Professional Title :** Associate Environmental Planner  
**Business/Organization :** California Department of Transportation - Division of Environmental Planning  
**Address :** 100 South Main Street  
**Apt./Suite No. :** MS 16A  
**City :** Los Angeles  
**State :** CA  
**Zip Code :** 90012  
**Telephone :**  
**Email :** Vanessa.Velasco@dot.ca.gov  
**Cell Phone :**  
**Email Subscription :**  
**Add to Mailing List :**  
**Stakeholder Comments/Issues :**

Hello!

Caltrans District 7 (Los Angeles and Ventura Counties) has reviewed the DEIR/DEIS for the High-Speed Rail segment from Bakersfield to Palmdale. We have attached our comment letter for inclusion into the final environmental document.

Thank you for the opportunity to comment. A hard copy letter will be mailed today.

Stay safe!

Vanessa Velasco  
Associate Environmental Planner

Division of Environmental Planning  
California Department of Transportation  
100 South Main Street, MS 16A  
Los Angeles, CA 90012

**EIR/EIS Comment :** Yes  
**Attachments :** HSR DEIR\_DEIS Caltrans D7 Cmnt Letter 04.13.2020.pdf (542 kb)

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 7  
100 S. MAIN STREET, SUITE 16A  
LOS ANGELES, CA 90012  
PHONE (213) 897-0362  
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TTY 711  
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Making Conservation  
a California Way of Life.

April 13, 2020

Mr. Mark A. McLoughlin  
Director of Environmental Sciences Branch  
California High-Speed Rail Authority  
770 L Street, Suite 620, MS-1  
Sacramento, CA 95814

Dear Mr. McLoughlin,

The California Department of Transportation appreciates the opportunity to comment on the Bakersfield to Palmdale Project Section Draft Environmental Impact Report (DEIR)/Draft Environmental Impact Statement (DEIS) prepared by the California High-Speed Rail Authority (CHSRA). As a Responsible Agency and Cooperating Agency under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) respectively, Caltrans has reviewed the DEIR/DEIS in an effort to advance the environmental review for this project. The proposed project includes 4 Build Alternatives and 1 No Build Alternative, with the Build Alternatives varying in their alignment but all involve the construction of new dedicated rail tracks for electrically powered, high-speed trains. As a result of Caltrans' review of the DEIR/DEIS, the following comments are provided.

724-638

Chapter 1 Project Purpose, Need, and Objectives

Page 1-1: This section should specifically mention that the 2018 CSRP identifies the Bakersfield to Palmdale as a HSR segment in their Rail Network Vision.

724-639

Volume 2-A Road Crossings, Closures and Detours

Page 2-A-14, Alt 5: Bus stations serve multiple AVTA lines. If Sierra Highway is realigned, these stations should be upgraded with enhanced complete streets features such as: concrete bus pad, bus terminal, bus shelter, widened sidewalks, pedestrian friendly lighting, drought-tolerant landscaping, etc. Stations are located at:

- Sierra Hwy & Avenue I
- Sierra Hwy & Lancaster Blvd
- MetroLink/Sierra Hwy
- Sierra Hwy & Avenue J
- Sierra Hwy & Avenue J-7
- Sierra Hwy & Avenue K
- Sierra Hwy & Avenue L
- Sierra Hwy & Avenue L-8
- Avenue M & Sierra Hwy

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

# Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020) - Continued

April 13, 2020  
Page 2

724-640

Section 3.2 Transportation

The mitigation and proposal modify SR-138 (Palmdale Blvd.) between 5th St. East and 10th St. East and should be in compliance with the preferred alternative of Project EA-35440k, the Palmdale Blvd. Grade Separation Project.

Efforts are currently underway by the Federal Railroad Administration (FRA) and Virgin Trains USA to develop HSR between Victorville and Palmdale (formerly proposed as part of the High Desert Corridor project). CHSRA should coordinate with those entities regarding the most suitable locations and configuration for the rail station and tracks.

The HSR alignment will impact the existing SR-138 roundabout (RBT). The mitigation measures should expand to the RBT extensively. Any improvement to the existing RBT needs to comply with Caltrans Intersection Control Evaluation (ICE) Policy.

The HSR alignment will impact the existing SR-138 at Avenue T. The mitigation measures should consider placing a roundabout. Caltrans requests more information pertaining to the mitigation proposal. Any improvements to the existing intersection control need to comply with Caltrans ICE Policy.

Pertaining to SR-14, Caltrans requests a detailed Traffic Impact Study that includes:

- Potential effects on SR-14 N/O 10th St. W. and SR-14 S/O Avenue S.
- Trip generation and circulation to and from the Palmdale station.
- The traffic impact to 10th street west off ramp and on ramp onto SR-14.
- The traffic impact to Rancho Vista on ramp and off ramp onto SR-14.
- The traffic impact to Palmdale Blvd. on ramp and off ramps to SR-14.
- The traffic impact to Avenue S on ramp and off ramp to SR-14. –
- The impact on Eastbound Rancho Vista traffic pertaining to the proposed mitigation of providing a traffic signal with Westbound continuous green phase.

724-641

Section 3.9 Geology, Soils, Seismicity, and Paleontological Resources

Section 3.9: As the proposed HSR alignment is to cross SR-138 and SR-14, please discuss the need for a grade separation at each crossing point. In regards to the type of grade separation is to be proposed at these locations, Caltrans suggests using elevated structures (bridges or railroad passes) rather than a tunnel due to the soil characteristics in this region and cost considerations.

724-642

Section 3.16 Aesthetics and Visual Quality

Section 3.16: A Landscape Architect should be involved in the development and review of this section.

724-643

Page 3.16-135 Chapter 8 Alternatives and Visual Sections: Table 3.16-11 is different than Chapter 8 Preferred Alternative and Station Site(s) table for Aesthetics and Visual Quality, though they should be the same.

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April 13, 2020  
Page 3

724-644

Page 3.16-131: Clarify how AVQ-MM#3 will be designed with "principles of crime prevention". Also, instead of "environmental design" the measure should use the language "landscape design".

724-645

Page 3.16-132: The measure of not including invasive species does not belong in the Visual and Aesthetic section but rather is more appropriate in the Biological Resources section.

724-646

Air Quality and Global Climate Change Technical Report/Supplement

Pages 5-4 to 5-5: Table 5-1 presents ambient concentrations data in 2013, 2014, and 2015. The Table should expand to include the latest data from 2016 to 2018 as well.

724-647

Page 5-5: The concentration data for PM10 in 2015 is incorrect.

724-648

Page 6-6, Section 6.4, Microscale Carbon Monoxide Analysis: The existing year of 2016 identified in this Section is not consistent with the existing year of 2015 identified elsewhere in the document.

724-649

Page 6-6, Section 6.4.1.2, Emission Model: Emissions were calculated based on an older version of emissions inventory. Emissions should be estimated based on the latest emissions inventory, EMFAC 2017. It is also recommended that this report consider using the latest adjustment factors recently developed by the California ARB and approved by U.S. EPA.

724-650

Page 7-7, Section 7.3.1: It is noted that "HSR is predicted to reduce daily roadway VMT by more than 4 billion due to travelers using the HSR system instead of driving." Although VMT is anticipated to decrease by more than 4 billion in the horizon year (2040) as shown in Tables 7-17 through 7-19, this statement would not be applicable for VMTs in 2029, which decreased by more than 2 billion as shown in Tables 7-14 through 7-16.

Thank you for the opportunity to comment on this project. We look forward to your response and the ongoing coordination between our agencies as a means to a more effective permit application process. If you have any questions about this letter, please contact Vanessa Velasco, Associate Environmental Planner at [Vanessa.velasco@dot.ca.gov](mailto:Vanessa.velasco@dot.ca.gov).

Sincerely,



**RONALD KOSINSKI**  
Deputy District Director  
Division of Environmental Planning

Enclosure

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

## Response to Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020)

### 724-638

The commenter requested that the section specifically mention that the 2018 California State Rail Plan (Caltrans 2018) identifies Bakersfield to Palmdale Project Section as an HSR segment in its Rail Network Vision. Text was added to Section 1.1.1 of this Final EIR/EIS indicating that the 2018 California State Rail Plan identifies the Bakersfield to Palmdale Project Section in its Rail Network Vision.

### 724-639

The commenter suggests upgrading bus stations affected by the realignment of Sierra Highway under Alternative 5. In the event that the Preferred Alternative affects existing bus stations within the work zone, the design-builder would provide a temporary bus stop at a safe and convenient location away from where construction is occurring in close coordination with the transit operator. The proposed HSR alignment through this area would not preclude enhanced bus stops along Sierra Highway. The enhancements and upgrades to existing stations are not required to mitigate for an environmental impact. The Authority will work with Caltrans and transit operators outside the environmental process to discuss funding for enhancements.

### 724-640

The commenter requests that various impacts on Caltrans' existing and proposed facilities, including SR 138, be mitigated, and that the Authority should coordinate with entities including the Federal Railroad Administration and Xpress West regarding HSR service between Victorville and Palmdale. The commenter also requests a detailed Traffic Impact Study for a portion of SR 14 and various city roadways near SR 14.

The SR 138 Improvements Project that would widen SR 138 between 5th Street E and 10th Street E in downtown Palmdale from two lanes to three lanes in each direction, along with other associated improvements, is listed in Table 3.19-A-6, Planned and Potential Projects and Plans –City of Palmdale, in Appendix 3.19-A, Cumulative Project List. Caltrans is the lead agency for the SR 138 Improvements Project, per information available on California CEQAnet. Information regarding EA 35440k, the Palmdale Boulevard Grade Separation Project, is not publicly available. However, the Authority will coordinate with local jurisdictions and stakeholders, including Caltrans, during final design to ensure that impacts continue to be avoided and minimized wherever feasible.

In addition to local jurisdictions, the Authority is also committed to working closely with various stakeholders, including other rail operators, during project development and final design. Additionally, EMI/EMF-IAMF#1, detailed in Appendix 2-E, subheading EMI/EMF Standards, requires coordination between the HSR team and freight rail operators to avoid potential interference between the HSR system and adjacent railroads.

It is assumed the commenter is referring to the roundabout at the location of Palmdale Boulevard (SR 138) and 47th Street E. The location of that roundabout is roughly 4 miles east of the HSR alignment, and no direct impacts would occur.

The existing SR 138 alignment at Avenue T is within the Palmdale to Burbank Project Section limits. Impacts on this portion of the roadway are not analyzed in this Final EIR/EIS, but rather will be addressed in the Draft EIR/EIS currently being prepared for the Palmdale to Burbank Project Section.

The commenter also requests a detailed traffic impact study for a variety of SR 14 interchanges and on- and off-ramps. With the exception of trip generation and circulation to and from the Palmdale Station, which is discussed in Section 3.2 of this Final EIR/EIS, impacts on these facilities are not analyzed in this Final EIR/EIS, but

## Response to Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020) - Continued

### 724-640

rather will be addressed in the Draft EIR/EIS currently being prepared for the Palmdale to Burbank Project Section.

The Palmdale Station has been designed to account for the potential for Xpress West to connect with California HSR trains at the proposed station site. It is understood that various details of the design of the Xpress West Trains project are under consideration and may change. As design plans are finalized, the Authority may consider modifications to the Palmdale Station and would complete any additional analysis required under CEQA and NEPA, if necessary.

### 724-641

As identified in the Alignment Plans on pages TT-D1075 and TT-D1076 of Volume 3 of this Final EIR/EIS, the proposed grade separations at both SR 138 and SR 14 will be viaducts over the Caltrans facilities. No tunnels are proposed in this area.

### 724-642

The commenter states that a landscape architect should be involved in the development and review of Section 3.16, Aesthetics and Visual Quality, of the EIR/EIS.

The Authority's analysis methodology is based on Federal Highway Administration's 2015 Guidelines for the Visual Impact Assessment of Highway Projects. The Federal Highway Administration's visual impact assessment methodology recommends that visual impact assessment authors have "skills associated with evaluating landscape aesthetics typical of a licensed landscape architect or other similarly trained professional..." A landscape architect is not required to be involved in the development or review per that methodology. In compliance with the Authority's methodology and Federal Highway Administration's 2015 guidelines, Section 3.16 authors have experience and skills in preparing aesthetics and visual impact analyses. No revisions have been made to this Final EIR/EIS in response to this comment.

### 724-643

The commenter notes discrepancies between Chapter 8 and Section 3.16 of the Draft EIR/EIS.

Both Table 3.16-11 in Section 3.16, Aesthetics and Visual Quality, and Table 8-1 in Chapter 8, Preferred Alternative, correctly identify the number of key viewpoints with significant and unavoidable decreased visual quality under CEQA. However, the descriptor in the row heading of Table 8-1 is not accurate as it states, "number of key viewpoints with decreased visual quality," instead of the correct description of "number of key viewpoints with significant and unavoidable decreased visual quality." The row heading has been corrected in Table 8-1 of the Final EIR/EIS (refer to Chapter 8).

Another discrepancy between Table 8-1 and Table 3.16-11 is that Table 8-1 does not identify impact differentiators between the César E. Chávez National Monument Design Option and Refined César E. Chávez National Monument Design Option compared to the other end-to-end alternatives. The purpose of Table 8-1 of the Draft EIR/EIS is to provide comparative information on the environmental impacts by topical area for the four B-P Build Alternatives. The impacts presented in Table 8-1 of the Draft EIR/EIS did not reflect the design options, which could be added to any of the four B-P Build Alternatives. Addition of the design options would result in the same impact changes across all alternatives and therefore would not contribute to this evaluation differentiating between alternatives to identify a preferred alternative among the four B-P Build Alternatives. However, to provide consistency between Table 8-1 and other tables in Chapter 3, such as Table 3.16-11, Table 8-1 has been updated in the Final EIR/EIS to include the César E. Chávez National Monument Design Option and Refined César E. Chávez National Monument Design Option.

## Response to Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020) - Continued

### 724-644

The commenter asks how AVQ-MM#3 will be designed with “principles of crime prevention” and suggests the term “landscape design” should be used instead of “environmental design.”

A provision of AVQ-MM#3 requires the design of nonstation structures to “integrate trees and landscaping where possible to soften and buffer the appearance of guideways, columns, and elevated stations. This will be consistent with the principles of crime prevention through environmental design.” This mitigation measure refers to the “Crime Prevention Through Environmental Design” principles. Crime Prevention Through Environmental Design is based on the principle that proper design of buildings and public spaces can lead to a reduction in the incidence of crime (<https://www.cpted.net/>). In terms of the landscaping design, examples of incorporation of Crime Prevention Through Environmental Design principles include: (1) providing landscaping that does not create hiding places; (2) keeping tree limbs at least 6 feet above the ground to reduce shadows and provide visibility; (3) using planted wall features or vines to avoid blank wall spaces to deter graffiti; and (4) using trees with thin branches near lighting sources to reduce shadows and ensure adequate lighting of spaces for safety. The mitigation measure requires incorporation of Crime Prevention Through Environmental Design principles to ensure that landscaping required by this measure does not result in residual safety and security impacts. No revisions have been made to this Final EIR/EIS in response to this comment.

### 724-645

The commenter states that mitigation measures in Section 3.16, Aesthetics in Visual Quality, of the Draft EIR/EIS that prohibit the use of invasive species should not be included in Section 3.16, but instead should be included in Section 3.7, Biological and Aquatic Resources.

The commenter is referring to Mitigation Measures AVQ-MM#4 (Provide Vegetation Screening along At-grade and Elevated Guideways Adjacent to Residential Areas), AVQ-MM#5 (Replant Unused Portions of Land Acquired for the HSR), and AVQ-MM#6 (Plant Landscape Treatments along the HSR Project Overheads, Embankment, and Retained-Fill Elements), which state that “[n]o species on the list from the Invasive Species Council of California shall be planted.” These provisions have been included in the mitigation measures to ensure that no secondary effects related to invasive species or harm to native species would occur as a result of implementing these mitigation measures. No revisions have been made to this Final EIR/EIS in response to this comment.

### 724-646

This comment suggests that Table 5-1 in the Air Quality and Global Climate Change Technical Report/Supplement should include ambient concentrations data from 2016 to 2018. The Air Quality and Global Climate Change Technical Report was prepared between 2015 and July 2018. The data included in Table 5-1 were the latest available data at the time of preparation. Ambient concentrations are provided for informational purposes, and updates to these data do not affect the findings of the analysis. However, the Final EIR/EIS has been revised to include the latest ambient concentrations data.

## Response to Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020) - Continued

### 724-647

This comment suggests that the concentration data reported for PM<sub>10</sub> in 2015 in the Air Quality and Global Climate Change Technical Report/Supplement are incorrect. The Air Quality and Global Climate Change Technical Report was prepared between 2015 and July 2018. The data included in Table 5-1 were provided by the California Air Resources Board (CARB) at the time the section was prepared, a copy of which is available in the project administrative record. Based on a review of the current data, it appears that CARB has since updated the concentration data on its website for PM<sub>10</sub>. The background ambient air quality data do not change any of the findings or conclusions in this Final EIR/EIS. However, the Final EIR/EIS has been revised to include the latest ambient concentrations data.

### 724-648

This comment states that the existing year of 2016 identified in the Microscale Carbon Monoxide (CO) Analysis section of the Air Quality and Global Climate Change Technical Report/Supplement (Authority 2018a and 2018b) is not consistent with the existing year of 2015 identified elsewhere in the document. The CO hot-spot analyses were conducted using traffic data derived from traffic counts and other information developed as part of an overall traffic analysis for the HSR project. As discussed in Section 3.2.4.3, Study Assumptions and Baselines for Transportation Impact Analysis, of this Final EIR/EIS, the transportation impacts considered an existing year of 2016. As such, the CO hot-spot analyses are consistent with the transportation assumptions. Therefore, the year 2016 was used for the analysis. It should be noted that year 2016 analysis is considered representative of year 2015 and is consistent with the traffic data collected.

### 724-649

This comment indicates that emissions were calculated based on an older version of the emissions inventory and that emissions should be estimated based on the latest emissions inventory and using the latest adjustment factors. At the time the Air Quality and Global Climate Change Technical Report was prepared, EMFAC 2014 was the latest emissions factor model available for use.

In addition, it should be noted that as per USEPA guidance:

The EPA's approval of the EMFAC2017 emissions model for SIP [state implementation plans] and conformity purposes is effective August 15, 2019. EMFAC2017 must be used as described in this Notice for all new regional emissions analyses for transportation conformity purposes that are started on or after August 16, 2021 and for all new carbon monoxide (CO) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) hot-spot analyses that are started on or after August 17, 2020.

As the analysis was done before these mandated dates, EMFAC2014 is still approved for use. As the regional and statewide analyses are considered conservative now due to SAFE legislation, a footnote was added to the Table 3.3-44 explaining this. In addition, Table 3.3-44 of the Final EIR/EIS was adjusted to reflect the impact of the Safer Affordable Fuel-Efficient (SAFE) Vehicle Rule, as per CARB's "EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One" issued on November 20, 2019.

## Response to Submission 724 (Vanessa Velasco, California Department of Transportation - Division of Environmental Planning, April 14, 2020) - Continued

### 724-650

This comment suggests that although vehicle miles traveled is anticipated to decrease by more than 4 billion in the horizon year (2040), as shown in Tables 7-17 through 7-19 of the Air Quality and Global Climate Change Technical Report (Authority 2018a), this statement would not be applicable for vehicle miles traveled in 2029, which decreased by more than 2 billion, as shown in Tables 7-14 through 7-16. As discussed in Section 3.3.4.4 of this Final EIR/EIS, the air quality analysis was based on the existing (2015) and horizon year (2040) modeling years. In addition, as identified in Section 3.3.4.4 of this Final EIR/EIS, the Bakersfield to Palmdale Project Section Air Quality and Global Climate Change Technical Report (Authority 2018) includes additional data and information about anticipated emissions for a 2029 Phase 1 opening year. Section 3.3 describes that HSR is predicted to reduce 2040 roadway vehicle miles traveled and thereby reduce criteria pollutant emissions. As disclosed in the text, the opening year of HSR operations would lead to a more modest level of vehicle miles traveled reduction (a reduction of approximately 2.2 billion vehicle miles traveled in the opening year [Authority 2018a]), and a more modest level of criteria pollutant reduction than in 2040, but would still be beneficial in the opening year and would build over time.

## Submission 814 (Eric Broneer, California Highway Patrol, April 17, 2020)

**Bakersfield - Palmdale - RECORD #814 DETAIL**

**Status :** Action Pending  
**Record Date :** 5/18/2020  
**Affiliation Type :** State Agency  
**Submission Date :** 4/17/2020  
**Interest As :** State Agency  
**Submission Method :** Email  
**First Name :** Eric  
**Last Name :** Broneer  
**Professional Title :** Captain  
**Business/Organization :** California Highway Patrol  
**Address :** 2041 West Avenue I  
**Apt./Suite No. :**  
**City :** Lancaster  
**State :** CA  
**Zip Code :** 93536  
**Telephone :** 661-948-8541  
**Email :** EBroneer@chp.ca.gov  
**Cell Phone :**  
**Email Subscription :**  
**Add to Mailing List :** Yes  
**EIR/EIS Comment :** Yes  
**Attachments :** 814\_CHP\_Clearinghouse.pdf (670 kb)

**From:** Broneer, Eric@CHP <EBroneer@chp.ca.gov>  
**Sent:** Friday, April 17, 2020 2:01 PM  
**To:** OPR State Clearinghouse  
**Cc:** Saunders, Joseph@CHP  
**Subject:** SCH# 2009082062

814-862 No impact to Antelope Valley Area's local operations and/or public safety by SCH# 2009082062 was identified.

**Captain Eric A. Broneer**  
**2041 West Avenue I**  
**Lancaster, CA 93536**  
**(661) 948-8541**

4/28/2020



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## Response to Submission 814 (Eric Broneer, California Highway Patrol, April 17, 2020)

### 814-862

The commenter indicates that the Antelope Valley Office of the California Highway Patrol identified no impact on its local operations and/or public safety as a result of the development of the Bakersfield to Palmdale Project Section. The Authority appreciates the California Highway Patrol's review of the Draft EIR/EIS.

No revisions have been made to this Final EIR/EIS in response to this comment.

## Submission 723 (Matthew Cervantes, California Public Utilities Commission - Rail Crossings and Engineering Branch, April 13, 2020)

**Bakersfield - Palmdale - RECORD #723 DETAIL**

Section.pdf (153 kb)

**Status :** Action Pending  
**Record Date :** 4/17/2020  
**Response Requested :** Yes  
**Affiliation Type :** State Agency  
**Submission Date :** 4/13/2020  
**Interest As :** State Agency  
**Submission Method :** Project Email  
**First Name :** Matthew  
**Last Name :** Cervantes  
**Professional Title :** Utilities Engineer  
**Business/Organization :** California Public Utilities Commission - Rail Crossings and Engineering Branch  
**Address :** 320 WEST 4TH STREET  
**Apt./Suite No. :** SUITE 500  
**City :** LOS ANGELES  
**State :** CA  
**Zip Code :** 90013  
**Telephone :** 213.266.4716  
**Email :** Matthew.Cervantes@cpuc.ca.gov  
**Cell Phone :** 213.440.5125  
**Email Subscription :**  
**Add to Mailing List :**  
**Stakeholder Comments/Issues :**

Dear Mr. McLoughlin:

The California Public Utilities Commission has jurisdiction over rail crossings in California. The Commission's Rail Crossings Engineering Branch is in receipt of the Draft Environmental Impact Report for the proposed California High-Speed Rail - Bakersfield to Palmdale Project Section.

Please accept and review the attached comment letter regarding this segment of the High-Speed Rail project. You may contact me with any questions, or to set up diagnostic meetings to review the crossings along the corridor.

Matt Cervantes, PE  
Utilities Engineer  
California Public Utilities Commission  
Rail Crossings and Engineering Branch  
T: 213.266.4716  
C: 213.440.5125  
<http://www.cpuc.ca.gov/crossings/>

**EIR/EIS Comment :** Yes  
**Attachments :** SCH2009082062 California High Speed Rail Bakersfield Palmdale Section.pdf (153 kb)

# Submission 723 (Matthew Cervantes, California Public Utilities Commission - Rail Crossings and Engineering Branch, April 13, 2020) - Continued

STATE OF CALIFORNIA  
PUBLIC UTILITIES COMMISSION  
320 WEST 4TH STREET, SUITE 500  
LOS ANGELES, CA 90013

Govin Newsom, Governor



723-574

723-575

April 13, 2020

Mark A. McLoughlin  
California High-Speed Rail Authority  
770 L Street, Suite 620 MS-1  
Sacramento, CA 95814

Sent by email to: Bakersfield\_Palmdale@hsr.ca.gov

**Re: California High-Speed Rail – Bakersfield to Palmdale Project Section  
SCH 2009082062 — Draft Environmental Impact Report**

Dear Mr. McLoughlin:

The California Public Utilities Commission (Commission/CPUC) has jurisdiction over rail crossings (crossings) in California. CPUC ensures that crossings are safely designed, constructed, and maintained. The Commission's Rail Crossings Engineering Branch (RCEB) is in receipt of the *Draft Environmental Impact Report (DEIR)* for the proposed California High-Speed Rail – Bakersfield to Palmdale Project Section. California High-Speed Rail Authority (Authority) is the lead agency.

The Notice of Availability (NOA) provided by the Authority states that the Bakersfield to Palmdale Project Section will provide a connection from the Central Valley to the Antelope Valley and Los Angeles County, closing the existing passenger rail gap between Northern and Southern California through the Tehachapi Mountains, as well as providing new opportunities for economic development and revitalization in the cities along this corridor. The approximately 80-mile project section will travel through or near the communities of Bakersfield, Edison, Tehachapi, Rosamond, Lancaster and Palmdale with stations in Bakersfield and Palmdale.

Section S.5.2 of the DEIR outlines the Bakersfield to Palmdale (B–P) Build Alternatives 1,2,3, and 5. The High-Speed Rail (HSR) is proposed to operate on a fully dedicated right-of-way, and fully grade-separated at highway-rail crossings. Table S-1 on Page S-12 of the DEIR Summary summarizes a total of 74 or 75 proposed grade-separated crossings, subject to CPUC approval. Appendix 2-A: Road Crossings, Closures, and Detours lists all proposed roadway closures and crossings for each alternative. In addition, Appendix 2-B: Railroad Crossings lists rail-rail crossings of the HSR with Union Pacific Railroad (UPRR) and Metrolink (SCRRA) tracks.

723-573

CPUC General Order (G.O.) 88-B establishes criteria for altering existing crossings, including roadway realignment, reconstruction of grade-separated structures, and construction of a grade-separated structure that eliminates an existing at-grade crossing. The Authority will be required to submit a G.O. 88-B request for alteration of each existing crossing on the corridor, unless an application to the Commission is required. Requests to alter existing crossings may be approved by RCEB staff, provided completion of request as outlined in G.O. 88-B, Section 5 and consensus among parties. Roadways closed at the HSR corridor may require G.O. 88-B authorization if a nearby grade crossing remains in place.

G.O. 88-B also establishes cases for which the Authority must apply to the Commission for authorization, including construction of new highway-rail or rail-rail crossings. Refer to the CPUC Rules of Practice and Procedure ([www.cpuc.ca.gov/rpp/](http://www.cpuc.ca.gov/rpp/)), Rule 3.9 Railroad Across Public Road and Rule 3.10 Railroad Across Railroad, for new crossing application requirements. You may consult with RCEB staff to determine the need for authorization by G.O. 88-B or by application at each proposed crossing on the corridor.

723-574

All grade-separated structures, including rail-rail structures, are subject to minimum vertical and horizontal clearance requirements outlined in G.O. 26-D, Section 2, Section 3, and Section 4. Clearance between parallel tracks is governed by G.O. 26-D, Section 5. Public roads, highways, and streets crossing under tracks and over

Mark McLoughlin  
SCH 2009082062  
April 13, 2020

tracks are subject to G.O. 26-D, Section 12 and Section 13, respectively. The overhead contact system (OCS) powering the HSR is subject to clearance requirements stated in G.O. 95 and G.O. 176.

A diagnostic meeting is required for each crossing alteration or construction. The diagnostic team consists of representatives from the railroads, roadway agencies, local government agencies, CPUC, and private stakeholders. You may contact RCEB staff to schedule diagnostic meetings, and to discuss preliminary designs of grade-separated structures.

Please continue to keep RCEB informed of the project's development. If you have any questions, you may contact Matt Cervantes ([matthew.cervantes@cpuc.ca.gov](mailto:matthew.cervantes@cpuc.ca.gov)) to discuss crossings in Los Angeles County and Oliver Garcia ([oliver.garcia@cpuc.ca.gov](mailto:oliver.garcia@cpuc.ca.gov)) to discuss crossings in Kern County.

Sincerely,

Matt Cervantes  
Utilities Engineer  
Rail Crossings and Engineering Branch  
Rail Safety Division

CC: State Clearinghouse, [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)  
Peggy Ygbuhay (UPRR), [pygbuhay@up.com](mailto:pygbuhay@up.com)  
Donald Filippi (Metrolink), [FilippiD@scrna.net](mailto:FilippiD@scrna.net)

## Response to Submission 723 (Matthew Cervantes, California Public Utilities Commission - Rail Crossings and Engineering Branch, April 13, 2020)

### 723-573

As noted in the comment, the Authority will submit a General Order 88-B request to the California Public Utilities Commission (CPUC), unless an application to the Commission is required. The Authority will continue to coordinate with the CPUC during the development of the final design plans for the Bakersfield to Palmdale Project Section.

### 723-574

As noted in the comment, the Authority has developed the preliminary design in a manner that meets the various general orders cited in the comment. Authority will comply with all CPUC General Orders 26-D, G.O. 95, and G.O. 176 clearance requirements. The Authority will continue to coordinate with the CPUC during the development of the final design plans.

### 723-575

The Authority will continue to coordinate with the CPUC during the development of the final design plans. Diagnostic meetings will be scheduled with the CPUC, as needed.

## Submission 815 (Gavin McCreary, Department of Toxic Substances Control, March 13, 2020)

Bakersfield - Palmdale - RECORD #815 DETAIL	
Status :	Action Pending
Record Date :	5/18/2020
Affiliation Type :	State Agency
Submission Date :	3/13/2020
Interest As :	State Agency
Submission Method :	Letter
First Name :	Gavin
Last Name :	McCreary
Professional Title :	Project Manager
Business/Organization :	Department of Toxic Substances Control
Address :	8800 Cal Center Drive
Apt./Suite No. :	
City :	Sacramento
State :	CA
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Telephone :	916-255-3710
Email :	gavin.mcCreary@dtsc.ca.gov
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	815_DeptoToxicSubstancesControl_Letter.pdf (2 mb)



Jared Blumenfeld  
Secretary for  
Environmental Protection

### Department of Toxic Substances Control

Meredith Williams, Ph.D., Director  
8800 Cal Center Drive  
Sacramento, California 95826-3200



Gavin Newsom  
Governor

March 13, 2020

Mr. Mark A. McLoughlin  
California High-Speed Rail Authority  
770 L Street, Suite 620 MS-1  
Sacramento, California 95814

DRAFT ENVIRONMENTAL IMPACT REPORT FOR CALIFORNIA HIGH-SPEED  
RAIL BAKERSFIELD TO PALMDALE SECTION – DATED FEBRUARY 2020  
(STATE CLEARINGHOUSE NUMBER: 2009082062)

Dear Mr. McLoughlin:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for California High-Speed Rail Bakersfield to Palmdale Section. The proposed project is construction and operation of a grade-separated, dedicated double-track, electric powered, passenger, steel-wheel-on-steel-rail, high-speed railroad between Bakersfield and Palmdale. The Bakersfield to Palmdale Project Section is approximately 80 miles in length between the approved Bakersfield Station and proposed station in Palmdale.

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

815-863

1. The EIR should acknowledge historic or future activities on or near the project site that may have the potential to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

815-864

2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in

©

## Submission 815 (Gavin McCreary, Department of Toxic Substances Control, March 13, 2020) - Continued

Mr. Mark A. McLoughlin  
March 13, 2020  
Page 2

- 815-864 | and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.
- 815-865 | 3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the environmental document. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml\\_handbook.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf)).
- 815-866 | 4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Guidance\\_Lead\\_Contamination\\_050118.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf)).
- 815-867 | 5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to DTSC's 2001 *Information Advisory Clean Imported Fill Material* ([https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP\\_FS\\_Cleanfill-Schools.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf)).
- 815-868 | 6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Aq-Guidance-Rev-3-August-7-2008-2.pdf>).

Mr. Mark A. McLoughlin  
March 13, 2020  
Page 3

DTSC appreciates the opportunity to review the EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP\\_App-1460.doc](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc). Additional information regarding voluntary agreements with DTSC can be found at: <https://dtsc.ca.gov/brownfields/>.

If you have any questions, please contact me at (916) 255-3710 or via email at [Gavin.McCreary@dtsc.ca.gov](mailto:Gavin.McCreary@dtsc.ca.gov).

Sincerely,



Gavin McCreary  
Project Manager  
Site Evaluation and Remediation Unit  
Site Mitigation and Restoration Program  
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research  
State Clearinghouse  
[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

Ms. Lora Jameson, Chief  
Site Evaluation and Remediation Unit  
Department of Toxic Substances Control  
[Lora.Jameson@dtsc.ca.gov](mailto:Lora.Jameson@dtsc.ca.gov)

Mr. Dave Kereazis  
Office of Planning & Environmental Analysis  
Department of Toxic Substances Control  
[Dave.Kereazis@dtsc.ca.gov](mailto:Dave.Kereazis@dtsc.ca.gov)

## Response to Submission 815 (Gavin McCreary, Department of Toxic Substances Control, March 13, 2020)

### 815-863

The commenter requests that the EIR/EIS acknowledge historic or future activities on or near the project site that may have the potential to result in the release of hazardous materials on the project site. In instances in which releases have occurred or may occur, the commenter requests that the Authority conduct further studies to assess the nature and extent of contamination, identify the mechanisms to initiate any required investigation and/or remediation, and identify the government agency responsible for providing appropriate regulatory oversight.

Section 3.10, Hazardous Materials and Wastes, and Volume 2, Appendix 3.10-A, Sites of Potential Concern, of the Draft EIR/EIS identified the known and/or potential historic presence of hazardous materials or wastes within 150 feet of the project footprint that could result in a release of hazardous materials/substances on the project site. Impact HMW#3, Temporary Effects Due to Project Location on Potential Environmental Concern Sites (PEC) or Sites on the Cortese List, acknowledges that the project may occur at or near historic or potential environmental concern sites and discusses the potential impacts. As discussed under Impact HMW#3, HMW-IAMF#1 would be implemented as part of all B-P Build Alternatives and would avoid or reduce potential effects associated with construction near historic or future (activities that may occur up until the time the assessments are prepared) PEC sites.

HMW-IAMF#1, Property Acquisition Phase I and Phase II Environmental Site Assessments, states that: (1) Phase I Environmental Site Assessments (ESA) shall be conducted for each parcel during the right-of-way acquisition phase; (2) the Phase I ESA will identify if a Phase II ESA is necessary; (3) the results of the Phase II ESA will identify if a site is affected with hazardous materials and if remediation or corrective action is necessary; and (4) remediation and corrective action would be conducted with state and local agency officials in full compliance with applicable state and federal laws and regulations (Section 3.10.4.2). The Phase I ESAs identify potential hazardous environmental conditions that may be present on site from historic or future activities (activities that may occur up until the time the assessments are prepared). Phase II ESAs include physical sampling and analytical testing for various site media (i.e., soil, soil vapor, groundwater). Therefore, the commenter's requests are already included in this Final EIR/EIS or are already included as part of the project, and changes to this Final EIR/EIS are not necessary in response to this comment.

### 815-864

The commenter indicates there is a potential for aurally deposited lead to be present along roadsides, in medians, and underneath some road surfaces throughout the Bakersfield to Palmdale Project Section and recommends collecting soil samples for lead analysis prior to performing any ground-disturbing activities.

Section 3.10.5.2, General Areas of Concern, of Section 3.10, Hazardous Materials and Wastes, of the Draft EIR/EIS discussed the potential presence of aurally deposited lead throughout the resource study area. HMW-IAMF#1, Property Acquisition Phase I and Phase II Environmental Site Assessments (Section 3.10.4.2), is a project feature that ensures each parcel acquired for the project will be assessed, if necessary, for aurally deposited lead, hazardous materials, and other general areas of concern. Therefore, the commenter's recommendation is already included as part of the project and changes to the Final EIR/EIS are not necessary in response to this comment.

## Response to Submission 815 (Gavin McCreary, Department of Toxic Substances Control, March 13, 2020) - Continued

### 815-865

The commenter requests that investigation for mining waste be discussed in the EIR/EIS. The commenter recommends that any sites with current or former mining operations in the project vicinity be evaluated for mining waste based on the California Department of Toxic Substances Control's (DTSC) Abandoned Mine Land Mines Preliminary Assessment Handbook (DTSC 1998).

Section 5.4, sites with Potential Environmental Concern, of the Bakersfield to Palmdale Project Section Hazardous Materials and Wastes Technical Report (Authority 2017) identifies known and/or potential historic mining operations in the resource study area. Section 3.10.5, Affected Environment, of Section 3.10, Hazardous Materials and Wastes, and Volume 2, Appendix 3.10-A, Sites of Potential Concern, of the Final EIR/EIS summarize the results of the report. Potential impacts associated with construction of the project in the vicinity of mining operations and potential impacts associated with mining wastes are addressed under Impact HMW#3, Temporary Effects Due to Project Location on Potential Environmental Concern Sites or Sites on the Cortese List, and Impact GSS#6, Potential Encounters with Abandoned Mines During Construction.

In addition to applicable rules and regulations, HMW-IAMF#1, Property Acquisition Phase I and Phase II Environmental Site Assessments, would be implemented as part of all the B-P Build Alternatives and would be sufficient to avoid or reduce potential effects associated with construction near PEC sites, including abandoned mines. HMW-IAMF#1 requires that, during the right-of-way acquisition phase, Phase I ESAs be conducted in accordance with standard ASTM International (formerly known as the American Society for Testing and Materials) methodologies to characterize each parcel. The determination of parcels that require a Phase II ESA (e.g., soil, groundwater, soil vapor subsurface investigations) would be informed by a Phase I ESA and may require coordination with state and local agency officials. If the Phase II ESA concludes that the site is affected, remediation or corrective action (e.g., removal of contamination, in situ treatment, or soil capping) would be conducted with state and local agency officials as necessary and in full compliance with applicable state and federal laws and regulations. The decision to use the Abandoned Mine Land Mines Preliminary Assessment Handbook (DTSC 1998) guidance document identified above will be determined by the regulatory agency performing assessment and remediation oversight; however,

### 815-865

applicable rules and regulations combined with HMW-IAMF#1 are sufficient and generally consistent with the identified guidance document. No revisions have been made to the Final EIR/EIS in response to this comment.

### 815-866

The commenter indicates that building material surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos-containing materials, and polychlorinated biphenyl caulk prior to demolition, and sampling near current and/or former buildings should be conducted in accordance with DTSC's Interim Guidance for Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers (DTSC 2006).

Impact HMW#1, Temporary Effects from the Routine Transport, Use, or Disposal of Hazardous Materials and Wastes, identifies that hazardous building materials that may be present in the resource study area. HMW-IAMF#4, Demolition Plans, indicates that the contractor shall prepare demolition plans for the safe dismantling and removal of building components and debris. For a demolition plan to be completed appropriately, the structures planned for demolition are required by federal and state regulations to be surveyed for lead-based paint/products and asbestos-containing materials. Although not stated specifically in the Draft EIR/EIS, these building surveys would also include assessment of other building materials that may contain hazardous materials, such as mercury and polychlorinated biphenyls. HMW-IAMF#4 has been revised in the Final EIR/EIS to also include the assessment of other building materials that may contain hazardous materials, such as mercury and polychlorinated biphenyls.

DTSC's 2006 Interim Guidance for Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers was created for the evaluation of properties that are planned for school construction and ultimate occupation by school-aged children, not a rail project with limited occupancy. Compliance with applicable rules and regulations combined with HMW-IAMF#4 is sufficient and generally consistent with the identified guidance document.



## Response to Submission 815 (Gavin McCreary, Department of Toxic Substances Control, March 13, 2020) - Continued

### 815-867

The commenter recommends that proper soil sampling be conducted if the project will require the importation of soil to ensure that the imported soil at the project site is free of contamination. The commenter recommends that imported materials be characterized according to DTSC's Information Advisory Clean Imported Fill Material Fact Sheet (DTSC 2001).

As discussed in Section 2.8.5.1 of the Draft EIR/EIS, soil is not anticipated to be imported to the project site because the Preferred Alternative would require a stockpile of excess materials in the area north of SR 58, in the vicinity of Bealville Road, where additional footprint has been identified. No changes have been made to this Final EIR/EIS based on this comment.

### 815-868

The commenter recommends that investigation for organochlorinated pesticides be discussed in the EIR/EIS. The commenter recommends that current and former agricultural lands be evaluated in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (Third Revision) (DTSC 2008).

Section 3.10.5.2, General Areas of Concern, of the Draft EIR/EIS discusses the potential presence of organochlorine pesticides (pesticides). In addition to applicable rules and regulations, HMW-IAMF#1, Property Acquisition Phase I and Phase II Environmental Site Assessments (ESA) (Section 3.10.4.2), was included to ensure that each parcel that would be acquired for the project will be assessed for general areas of concern, including agricultural use/pesticides (Section 3.10.5.2). HMW-IAMF#1 states that if a Phase II ESA concludes that a site is affected, remediation or corrective action (e.g., removal of contamination, in-situ treatment, or soil capping) would be conducted with applicable state and local agency officials as necessary and in full compliance with applicable state and federal laws and regulations. Therefore, the decision to use DTSC's Interim Guidance for Sampling Agricultural Properties will be made by the regulatory agency performing assessment and remediation oversight; however, applicable rules and regulations combined with HMW-IAMF#1 are sufficient and generally consistent with the identified guidance document. This guidance applies to proposed and/or expanded school sites or other projects where the proposed land use could increase human exposure. This would not generally apply to a rail project with limited occupancy. No changes have been made to this Final EIR/EIS in response to this comment.

# Submission 813 (Gayle Rosander, Department of Transportation, April 10, 2020)

Bakersfield - Palmdale - RECORD #813 DETAIL	
Status :	Action Pending
Record Date :	5/18/2020
Affiliation Type :	State Agency
Submission Date :	4/10/2020
Interest As :	State Agency
Submission Method :	Letter
First Name :	Gayle
Last Name :	Rosander
Professional Title :	External Project Liaison
Business/Organization :	Department of Transportation
Address :	500 South Main Street
Apt./Suite No. :	
City :	Bishop
State :	CA
Zip Code :	93514
Telephone :	760-872-0785
Email :	gayle.rosander@dot.ca.gov
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	813_DeptoTransportation_ClearinghouseLetter.pdf (155 kb)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

## DEPARTMENT OF TRANSPORTATION

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 TTY 711  
 www.dot.ca.gov

4/13/2020



Making Conservation  
 a California Way of Life.

April 10, 2020

Mr. Mark A. McLoughlin  
 California High-Speed Rail Authority  
 770 L Street, Suite 620, MS-1  
 Sacramento, CA 95814

File: Ker-58-var  
 DEIR/EIS  
 SCH#: 2009082062

### Bakersfield to Palmdale High-Speed Rail (HSR) Draft Environmental Impact Report/ Environmental Impact Statement (DEIR/EIS)

Dear Mr. McLoughlin:

Thank you for giving the California Department of Transportation (Caltrans) the opportunity to comment on the HSR DEIR/EIS, which spans Districts 6, 7, and 9. District 9's Kern County area is from Bealville to the Los Angeles County line. Hence, we have jurisdiction for State Route 58 in this area. We appreciate the DEIR/EIS acknowledging Caltrans permitting, standards, guidelines, etc., and environmental issues. Districts 6 and 7 will send separate comment letters. District 9 offers the following clarifications:

813-861

- Page 3.2-5, **California Department of Transportation District System Planning:** District 9's jurisdiction is from Bealville to the Los Angeles County line. Please revise sentence to - "The transportation resource study area extends into ~~two~~ ~~Caltrans districts (Districts 6 and 7)~~, three Caltrans districts (Districts 6, 7, and 9), ..."
- Page 3.2-5, **California Department of Transportation District System Planning:** Please revise sentence to - "~~District 6~~ Caltrans has developed TCRs for all of ...."
- Page 3.2-5, **California Department of Transportation District System Planning:** Please revise sentences to - "... (SR) 58, has a CSMP for its entire length in Districts 6 and 9."
- Page 3.2-5, **California Department of Transportation District System Planning:** Please revise sentence to - "~~Districts 6 and 7~~ Caltrans also engages in Local Development-Intergovernmental Review... in each ~~the~~ respective district."

For Caltrans District 9 area questions, please feel free to contact me at (760) 872-0785 or [gayle.rosander@dot.ca.gov](mailto:gayle.rosander@dot.ca.gov).

Sincerely,

GAYLE J. ROSANDER  
 External Project Liaison

c: State Clearinghouse  
 Caltrans: Scott Lau, D6; Miya Edmonson, D7; Mark Reistetter, D9

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

## Response to Submission 813 (Gayle Rosander, Department of Transportation, April 10, 2020)

### 813-861

The California Department of Transportation District System Planning subsection in Section 3.2.2.2 of Section 3.2, Transportation, in this Final EIR/EIS has been revised in the following locations to accurately identify the three Caltrans districts (6, 7 and 9) that are within the transportation resource study area:

- (1) Text box—The first sentence in the second paragraph has been revised to add District 9 in the parentheses stating which Caltrans districts are within the transportation resource study area. Caltrans Districts 6 and 7 are already noted in parentheses as being within the transportation study area;
- (2) Fourth paragraph, last sentence—The reference to "District 6" has been deleted to account for the fact that the other Caltrans districts in the transportation resource study area have developed Transportation Concept Reports;
- (3) Third paragraph, last sentence—The sentence has been revised to clarify that SR 58 has a Corridor System Management Plan for its entire length in Caltrans District 9 as well as in Caltrans District 6; and
- (4) Sixth paragraph, first sentence—The first sentence has been revised to delete the reference to Caltrans Districts 6 and 7 and just to refer to "Caltrans Districts" more generically to account for the fact that Caltrans District 9 also engages in Local Development-Intergovernmental Review with cities and counties in the district.

# Submission 752 (Ronald Kosinski, Department of Transportation - Division of Environmental Planning, April 13, 2020)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

Bakersfield - Palmdale - RECORD #752 DETAIL	
Status :	Action Pending
Record Date :	4/23/2020
Response Requested :	No
Affiliation Type :	State Agency
Submission Date :	4/13/2020
Interest As :	State Agency
Submission Method :	Letter
First Name :	Ronald
Last Name :	Kosinski
Professional Title :	Deputy District Director
Business/Organization :	Department of Transportation - Division of Environmental Planning
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Apt./Suite No. :	16A
City :	Los Angeles
State :	CA
Zip Code :	90012
Telephone :	213-897-0362
Email :	
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
Stakeholder Comments/Issues :	
EIR/EIS Comment :	Yes
Attachments :	HSR_DEIR_DEIS_Caltrans_D7_Cmnt_Letter_04.13.2020.pdf (542 kb)

## DEPARTMENT OF TRANSPORTATION

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Making Conservation  
 a California Way of Life.

April 13, 2020

Mr. Mark A. McLoughlin  
 Director of Environmental Sciences Branch  
 California High-Speed Rail Authority  
 770 L Street, Suite 620, MS-1  
 Sacramento, CA 95814

Dear Mr. McLoughlin,

The California Department of Transportation appreciates the opportunity to comment on the Bakersfield to Palmdale Project Section Draft Environmental Impact Report (DEIR)/Draft Environmental Impact Statement (DEIS) prepared by the California High-Speed Rail Authority (CHSRA). As a Responsible Agency and Cooperating Agency under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) respectively, Caltrans has reviewed the DEIR/DEIS in an effort to advance the environmental review for this project. The proposed project includes 4 Build Alternatives and 1 No Build Alternative, with the Build Alternatives varying in their alignment but all involve the construction of new dedicated rail tracks for electrically powered, high-speed trains. As a result of Caltrans' review of the DEIR/DEIS, the following comments are provided.

752-844

Chapter 1 Project Purpose, Need, and Objectives

Page 1-1: This section should specifically mention that the 2018 CSRP identifies the Bakersfield to Palmdale as a HSR segment in their Rail Network Vision.

752-845

Volume 2-A Road Crossings, Closures and Detours

Page 2-A-14, Alt 5: Bus stations serve multiple AVTA lines. If Sierra Highway is realigned, these stations should be upgraded with enhanced complete streets features such as: concrete bus pad, bus terminal, bus shelter, widened sidewalks, pedestrian friendly lighting, drought-tolerant landscaping, etc. Stations are located at:

- Sierra Hwy & Avenue I
- Sierra Hwy & Lancaster Blvd
- MetroLink/Sierra Hwy
- Sierra Hwy & Avenue J
- Sierra Hwy & Avenue J-7
- Sierra Hwy & Avenue K
- Sierra Hwy & Avenue L
- Sierra Hwy & Avenue L-8
- Avenue M & Sierra Hwy

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# Submission 752 (Ronald Kosinski, Department of Transportation - Division of Environmental Planning, April 13, 2020) - Continued

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752-846

Section 3.2 Transportation

The mitigation and proposal modify SR-138 (Palmdale Blvd.) between 5th St. East and 10th St. East and should be in compliance with the preferred alternative of Project EA-35440k, the Palmdale Blvd. Grade Separation Project.

Efforts are currently underway by the Federal Railroad Administration (FRA) and Virgin Trains USA to develop HSR between Victorville and Palmdale (formerly proposed as part of the High Desert Corridor project). CHSRA should coordinate with those entities regarding the most suitable locations and configuration for the rail station and tracks.

The HSR alignment will impact the existing SR-138 roundabout (RBT). The mitigation measures should expand to the RBT extensively. Any improvement to the existing RBT needs to comply with Caltrans Intersection Control Evaluation (ICE) Policy.

The HSR alignment will impact the existing SR-138 at Avenue T. The mitigation measures should consider placing a roundabout. Caltrans requests more information pertaining to the mitigation proposal. Any improvements to the existing intersection control need to comply with Caltrans ICE Policy.

Pertaining to SR-14, Caltrans requests a detailed Traffic Impact Study that includes:

- Potential effects on SR-14 N/O 10th St. W. and SR-14 S/O Avenue S.
- Trip generation and circulation to and from the Palmdale station.
- The traffic impact to 10th street west off ramp and on ramp onto SR-14.
- The traffic impact to Rancho Vista on ramp and off ramp onto SR-14.
- The traffic impact to Palmdale Blvd. on ramp and off ramps to SR-14.
- The traffic impact to Avenue S on ramp and off ramp to SR-14. –
- The impact on Eastbound Rancho Vista traffic pertaining to the proposed mitigation of providing a traffic signal with Westbound continuous green phase.

752-847

Section 3.9 Geology, Soils, Seismicity, and Paleontological Resources

Section 3.9: As the proposed HSR alignment is to cross SR-138 and SR-14, please discuss the need for a grade separation at each crossing point. In regards to the type of grade separation is to be proposed at these locations, Caltrans suggests using elevated structures (bridges or railroad passes) rather than a tunnel due to the soil characteristics in this region and cost considerations.

752-848

Section 3.16 Aesthetics and Visual Quality

Section 3.16: A Landscape Architect should be involved in the development and review of this section.

752-849

Page 3.16-135 Chapter 8 Alternatives and Visual Sections: Table 3.16-11 is different than Chapter 8 Preferred Alternative and Station Site(s) table for Aesthetics and Visual Quality, though they should be the same.

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752-850

Page 3.16-131: Clarify how AVQ-MM#3 will be designed with "principles of crime prevention". Also, instead of "environmental design" the measure should use the language "landscape design".

752-851

Page 3.16-132: The measure of not including invasive species does not belong in the Visual and Aesthetic section but rather is more appropriate in the Biological Resources section.

752-852

Air Quality and Global Climate Change Technical Report/Supplement

Pages 5-4 to 5-5: Table 5-1 presents ambient concentrations data in 2013, 2014, and 2015. The Table should expand to include the latest data from 2016 to 2018 as well.

752-853

Page 5-5: The concentration data for PM10 in 2015 is incorrect.

752-854

Page 6-6, Section 6.4, Microscale Carbon Monoxide Analysis: The existing year of 2016 identified in this Section is not consistent with the existing year of 2015 identified elsewhere in the document.

752-855

Page 6-6, Section 6.4.1.2, Emission Model: Emissions were calculated based on an older version of emissions inventory. Emissions should be estimated based on the latest emissions inventory, EMFAC 2017. It is also recommended that this report consider using the latest adjustment factors recently developed by the California ARB and approved by U.S. EPA.

752-856

Page 7-7, Section 7.3.1: It is noted that "HSR is predicted to reduce daily roadway VMT by more than 4 billion due to travelers using the HSR system instead of driving." Although VMT is anticipated to decrease by more than 4 billion in the horizon year (2040) as shown in Tables 7-17 through 7-19, this statement would not be applicable for VMTs in 2029, which decreased by more than 2 billion as shown in Tables 7-14 through 7-16.

Thank you for the opportunity to comment on this project. We look forward to your response and the ongoing coordination between our agencies as a means to a more effective permit application process. If you have any questions about this letter, please contact Vanessa Velasco, Associate Environmental Planner at [Vanessa.velasco@dot.ca.gov](mailto:Vanessa.velasco@dot.ca.gov).

Sincerely,



**RONALD KOSINSKI**  
Deputy District Director  
Division of Environmental Planning

Enclosure

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## Response to Submission 752 (Ronald Kosinski, Department of Transportation - Division of Environmental Planning, April 13, 2020)

**752-844**

Refer to Response to Comment 724-638, contained in this chapter.

**752-845**

Refer to Response to Comment 724-639, contained in this chapter.

**752-846**

Refer to Response to Comment 724-640, contained in this chapter.

**752-847**

Refer to Response to Comment 724-641, contained in this chapter.

**752-848**

Refer to Response to Comment 724-642, contained in this chapter.

**752-849**

Refer to Response to Comment 724-643, contained in this chapter.

**752-850**

Refer to Response to Comment 724-644, contained in this chapter.

**752-851**

Refer to Response to Comment 724-645, contained in this chapter.

**752-852**

Refer to Response to Comment 724-646, contained in this chapter.

**752-853**

Refer to Response to Comment 724-647, contained in this chapter.

**752-854**

Refer to Response to Comment 724-648, contained in this chapter.

**752-855**

Refer to Response to Comment 724-649, contained in this chapter.

**752-856**

Refer to Response to Comment 724-650, contained in this chapter.