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CALIFORNIA TRANSPORTATION COMMISSION

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January 17, 2017

Mr. Tom Fitzwater
 SVRT Environmental Planning Manager
 VTA Environmental Programs & Resources, Building B-2
 3331 North First Street
 San Jose, CA 95134

RE: Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (Draft SEIS/SEIR) for the Santa Clara Valley Transportation Authority's Bay Area Rapid Transit (BART) Silicon Valley – Phase II Extension Project

Dear Mr. Fitzwater,

The California Transportation Commission (Commission), as a Responsible Agency, received the Draft SEIS/SEIR for Santa Clara Valley Transportation Authority's (VTA) BART Silicon Valley – Phase II Extension Project. The project consists of a 16-mile extension of the BART system from BART's Warm Springs Station in Alameda County into Santa Clara County. VTA's BART Silicon Valley Program is planned to be implemented in two phases. This Draft SEIS/SEIR addresses Phase II, which is the remaining six miles of the Silicon Valley Program from Berryessa to San Jose that was not approved in the 2010 EIS. Although the 16-mile, six station, BART Silicon Valley Program was approved in previous EIRs, this SEIR will be the first California Environmental Quality Act (CEQA) document to evaluate a six mile, four station extension.

The Commission has no comments with respect to the project purpose and need, the alternatives studied, the impacts evaluated, and the evaluation methods used. The Commission should be notified as soon as the environmental process is complete, as the Commission cannot allocate funds to a project for design, right of way or construction until the final environmental document is complete and the Commission has considered the environmental impacts of the project and approved the environmentally cleared project for future consideration of funding.

S1-1

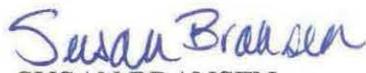
Mr. Fitzwater
Draft SEIS/SEIR for VTA's BART Silicon Valley – Phase II Extension Project
January 17, 2017
Page 2

Upon completion of the CEQA process, prior to the Commission's action to approve the project for future consideration of funding, the Commission expects the lead and/or implementing agency to provide written assurance whether the selected alternatives identified in the final environmental document is or is not consistent with the project programmed by the Commission and included in the Regional Transportation Plan. In the absence of such assurance of consistency, it may be assumed that the project is not consistent and Commission staff will base its recommendations to the Commission on that fact. The Commission may deny funding to a project which is no longer eligible for funding due to scope modifications or other reasons.

S1-1,
cont.

If you have any questions, please contact Jose Oseguera, Assistant Deputy Director, at (916) 653-2094.

Sincerely,


SUSAN BRANSEN
Executive Director

c: Phil Stolarski, Acting Chief (Division of Environmental Analysis), California Department of Transportation

Response to Comment Letter S1

California Transportation Commission

S1-1 Chapter 9, Section 9.4.1, *Capital Cost Funding*, describes the capital cost and sources of funding for the BART Extension. The funding strategy VTA has developed for the BART Extension relies on three key funding categories: (1) local sales tax, (2) state traffic congestion relief fund, and (3) federal Section 5309 New Starts funds. VTA is also exploring other sources to augment the existing local and state commitments for the BART Extension. VTA will continue to work with all potential funding sources, including the Commission, to refine the funding strategy for the BART Extension. As requested, upon completion of the CEQA process, VTA will provide written notification informing the Commission of the consistency between the selected alternative and the project programmed and included in the RTP.



State of California – The Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Bay Delta Region
 7329 Silverado Trail
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EDMUND G. BROWN JR., Governor
 CHARLTON H. BONHAM, Director



February 17, 2017

Mr. Tom Fitzwater, SVRT Environmental Planning Manager
 Santa Clara Valley Transportation Authority
 Environmental Programs & Resources Management, Building B-2
 3331 North First Street, San Jose, CA 95134
BARTPhase2EIS-EIR@vta.org

Dear Mr. Fitzwater:

Subject: Santa Clara Valley Transportation Authority Bay Area Rapid Transit (BART) Silicon Valley - Phase II Extension Project (Project) – DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT AND ENVIRONMENTAL IMPACT STUDY (DSEIR/DSEIS), SCH #2002022004

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DSEIR/DSEIS from Santa Clara Valley Transportation Authority (VTA) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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, we appreciate 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 the 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 and Game 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 and Game Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed

¹ 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.

may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Santa Clara Valley Transportation Authority (VTA)

Objective: The objective of the Project is to build a 6-mile extension of the BART system from Berryessa Station, through downtown San Jose, and to the Santa Clara Caltrain Station. The alignment would include an approximate 5-mile tunnel, or subway, through downtown San Jose. There are two tunnel construction methods that are evaluated in the DSEIR/DSEIS: the Twin-Bore Option (two 20-foot-diameter tunnels) and the Single-Bore Option (one 45-foot-diameter tunnel). Tunneling will occur below Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek.

Timeframe: Depending upon funding availability, initial revenue service on the BART Extension is targeted to begin in late 2025/2026. The Project would take approximately eight years for construction, testing, and start-up activities.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the VTA in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Chapter 6 CEQA Alternatives Analysis of Construction and Operation, Section 6.4 Biological Resources and Wetlands, Section 6.4.2.3 Jurisdictional Features, Fish and Game Code Section 1602 Jurisdiction

Issues and Impacts Discussion:

Within this section, it is stated that the Project facilities would be underground and would not affect the bed, channel, or bank of streams or associated riparian vegetation and, therefore, the Project is not subject to CDFW's Section 1602 jurisdiction.

As indicated above, under *Objective*, the Project would include tunnel construction under Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek.

It is generally stated, in Section 6.4.2.3 Jurisdictional Features of the DSEIR/DSEIS, that the tunnels would be located 20 to 50 feet below the stream beds. More specifically, it is stated that the Twin-Bore Option would pass approximately 25 feet below Coyote Creek and approximately 20 feet below Los Gatos Creek (Chapter 4 NEPA Alternatives Analysis of Operations, 4.17 Water Resources, Water Quality, and Floodplains, 4.17.4.2 BART Extension Alternative Surface Waters).

The primary concern of CDFW with regards to the tunneling depth is the potential for hydraulic fracture or other type of destabilization of the soils within the area between the stream beds and

S2-1,
cont.

S2-2

the tunnels. Any fracture or other soil destabilization during Project construction could result in substantial adverse effects to aquatic and/or riparian resources, and special-status species that may be present in the system such as steelhead (*Oncorhynchus mykiss*) and California red-legged frog (*Rana draytonii*) which are federally-listed under the Endangered Species Act and State Species of Special Concern. Fracture or other soil destabilization could also alter the contours of the stream bed or bank and divert or obstruct the natural flow of a stream.

S2-2,
cont.

For some projects, additives such as bentonite and polymers are injected ahead of the drill face to increase the stability of the soils during drilling. The DSEIR/DSEIS is not clear as to whether or not these additives would be used. If hydraulic fracture were to occur, there is potential for these additives to be deposited into the stream channel.

S2-3

The California Fish and Game Code Division 2, Chapter 6, Section 1602 states: An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

S2-4

If impacts to a stream, as discussed above, have the potential to occur, VTA should work with CDFW to obtain a Streambed Alteration Agreement (SAA) which would include measures to avoid, minimize, and mitigate for impacts to riparian habitat. The Final EIR/EIS for this Project would be used by CDFW in issuing a SAA.

S2-5

Recommendations:

Recommendation 1: The DSEIR/DSEIS should explain the depth of the top of the tunnel, for both the Twin-Bore Option and the Single-Bore Option, in relation to the elevation of the stream bed for all four streams (Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek).

S2-6

Recommendation 2: The DSEIR/DSEIS should clearly explain the type of substrate/soil through which the tunnel(s) will be drilled, for both the Twin-Bore Option and the Single-Bore Option. For both tunnel options, the DSEIR/DSEIS should analyze the potential of fracture or other soil destabilization that could result in alteration of the contours of the stream bed or bank or divert or obstruct the natural flow of a stream. This analysis should be conducted for all four streams (Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek).

S2-7

Recommendation 3: The DSEIR/DSEIS should disclose whether or not additives such as bentonite and polymers are injected ahead of the drill face and what specific type of additives will be used. If additives are to be used, the DSEIR/DSEIS should analyze, for both the Twin-Bore Option and the Single-Bore Option, the potential of fracture or other soil destabilization resulting in the deposition of these additives into the stream channel. This analysis should be conducted for all four streams (Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek).

S2-8

Recommendation 4: If the analysis, as recommended above, should indicate that there is a potential for fracture or other soil destabilization, Section 6.4.2.3 Jurisdictional Features, Fish and Game Code Section 1602 Jurisdiction should be changed to reflect the need for VTA to

S2-9

obtain a Streambed Alteration Agreement for the streams found to be impacted. Obtaining a SAA should be determined as necessary regardless of the degree of fracture or soil destabilization risk (low or high risk) and should be obtained if the analysis shows direct or indirect impacts to biological resources.

S2-9,
cont.

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 the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

S2-10

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is 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 and Game Code, § 711.4; Pub. Resources Code, § 21089.)

S2-11

CONCLUSION

CDFW appreciates the opportunity to comment on the DSEIR/DSEIS for the proposed Project to assist Santa Clara Valley Transportation Authority in identifying and mitigating Project impacts on biological resources.

For questions regarding this letter or further coordination in obtaining a Streambed Alteration Agreement, please contact Ms. Kristin Garrison, Environmental Scientist, at (707) 944-5534 or by email at Kristin.Garrison@wildlife.ca.gov or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or by email at Brenda.Blinn@wildlife.ca.gov.

S2-12

Sincerely,



Scott Wilson
Regional Manager
Bay Delta Region

cc: State Clearinghouse #2002022004

Response to Comment Letter S2

California Department of Fish and Wildlife, Bay Delta Region

S2-1 This is a general comment regarding CDFW's role on the project and a summary of the project. It does not raise any specific issues. See responses to comments S2-2 through S2-12 for responses to specific comments raised.

S2-2 The comment addresses the complex state-of-the-art technology involved with construction of the tunnel and how such technology addresses soil destabilization (ground settlement) and hydraulic fracking, which are issues of concern for the entire tunnel alignment, not just stream crossings. The project will not change or obstruct the natural flow of the bed, channel, or bank of any river, stream or lake. There are no modifications to water ways proposed.

Under both the Twin-Bore and Single-Bore Options, the tunnel would be constructed using a pressurized, closed-faced tunnel boring machine (TBM), of which there are three types of machines that may be utilized for the project: an earth-pressure-balanced (EPB) TBM, a slurry TBM, or a hybrid of the two. The choice of TBM is typically determined by soil conditions. Under conditions where there are cohesive soils with high clay and silt content and low water permeability, an EPB TBM is preferred. Under conditions where there are noncohesive soils with variable or high water permeability, a slurry TBM is preferred. Volume I, Section 2.2.2, *NEPA BART Extension Alternative*, outlines the differences to the project depending on whether a twin-bore or a single-bore TBM is selected. For projects with varying ground conditions, such as the BART Phase 2 Project, a hybrid machine may be the preferred choice.

In general, ground settlement and hydraulic fracking are addressed through use of a TBM as follows: (1) the pressure balance in the machine reduces the likelihood of ground settlement, (2) the depth of the machine under the stream beds reduces likelihood of ground settlement or hydraulic fracking, and (3) the conditioning fluids or slurries injected in front of the machine (towards the ground being cut by the cutterhead) are under low pressure and, as such, do not cause hydraulic fracking. The TBM technology that addresses ground settlement and hydraulic fracking is summarized below. In addition, Section 5.3.1, *Tunnel, Trackwork, and Ventilation Structures*, has been revised to include additional information regarding tunnel construction methodology.

Controlling ground settlement is primarily accomplished by: (1) maintaining TBM face pressures to balance the earth and groundwater pressures and thereby prevent over-excavation, (2) injecting of conditioning fluids or slurries to fill the small annular gaps outside the shield formed by the overcut of the TBM cutterhead, and (3) promptly filling with fast-setting cement grout the annular

space formed outside the precast-concrete lining segments as they form continuous rings behind the TBM shield.

During tunnel construction, the soil layer in front and above the tunnel face exerts active earth pressure, as does the presence of any overlying structures and other infrastructure. For a tunnel below the groundwater table, water pressure is another significant component of pressure acting at the tunnel face. To address ground settlement, the tunnel face support pressure needs to be built up to counterbalance the pressure generated by the soil, water, and overlying structures and other infrastructure. To do this, support mediums (conditioning fluids or slurries) are used to build up the required face support pressure. These various support mediums are described in response to comment S2-3. TBM face pressures are maintained close to the in-situ (pre-tunneling) earth and water pressures in the ground (the effective at-rest earth pressure, plus hydrostatic); therefore, the likelihood of loss of soil volume above the tunnel and flow of groundwater into the tunnel is effectively reduced, thus minimizing ground settlement.

Tunnels constructed with TBMs are designed to have sufficient soil cover over the tunnel to minimize ground settlements. Determination of the required cover is based on geotechnical data, and analysis performed on this data in conjunction with the requirements of the TBM. The approximate depths of the tunnel below Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek under the Twin-Bore and Single-Bore options are included in the table below and graphically shown in Appendix B.1, *Twin-Bore Tunnel Plans and Profiles*, and Appendix B.2, *Single-Bore Tunnel Plans and Profiles*. Some depths vary depending on the alignment or station option chosen. These depths are considered sufficient to address ground settlement in conjunction with other measures.

Waterway	Approximate Tunnel Bore Depth (to top of tunnel) Below Streambed (in feet)	
	Twin-Bore	Single-Bore
Lower Silver Creek	25	30
Coyote Creek	20	55
Guadalupe River	45 to 50	45 to 50
Los Gatos Creek	25 to 30	35 to 40

As stated in Section 6.8, *Geology, Soils, and Seismicity*, “for the Twin-Bore Option, any settlement would be distributed in a trough running parallel to and centered over the twin tunnel bores, with the maximum settlement of approximately 0.5 inch occurring at the centerline of the trough between the two bores. Maximum settlement with the Single-Bore Option is 1 inch.” If such settlement were to occur at any of the stream crossings, it is not anticipated that such settlement would “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any

river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.” It is also not anticipated that construction of the tunnel under the streams would impact any federal or state listed species.

For informational purposes, VTA will add ground surface monitoring at the stream crossings to Mitigation Measure GEO-CNST-C: Monitor Ground Surface during Tunneling Activities, described in Chapter 5, Section 5.5.9, *Geology, Soils, and Seismicity*. Therefore, the text of Mitigation Measure GEO-CNST-C in Chapter 5, Section 5.5.9, *Geology, Soils, and Seismicity*, has been revised as follows:

Mitigation Measure GEO-CNST-C: Monitor Ground Surface during Tunneling Activities

~~For the tunneling activity, The contractor will conduct ground surface monitoring will be performed prior to and during and after construction tunneling by licensed land surveyors. Instrumentation will be installed to monitor ground movements and effects of tunnel boring on structures and utilities. The contractor will mount survey monitoring points on potentially affected structures and representative historic buildings, including the most susceptible structures, select utilities susceptible to settlement, and in representative locations immediately adjacent to streams within the settlement trough along the tunnel alignment to monitor ground movements and effects of tunnel boring. The contractor will provide settlement m~~Monitoring data to VTA immediately upon completion of the field survey and use the data ~~can be used to direct real-time modifications, as appropriate, to tunneling practices and procedures~~ to assist in minimizing adverse effects along the tunnel alignment.

It should be noted that the TBM would have atypical progress rate of 40 to 50 feet per day for the Twin-Bore Option and 30 to 40 feet per day for the Single-Bore Option. Given this advance rate, the TBM would be beneath an overlying stream for 1 to 2 days.

Hydraulic fracturing occurs in soil or rock when the applied fluid pressure exceeds the soil or rock strength plus the confining pressure, which is generally related to depth below ground surface. All TBMs have the ability to introduce support mediums in front of the machine face; however, the relatively low pressures at the TBM face and around the TBM perimeter, and the relatively low grouting pressures implemented to fill any gap around the segmental liner after installation, preclude the occurrence of hydraulic fracturing. In addition, the overall depth of the TBM for either the Twin-Bore or Single-Bore option, as

described above, contributes to the reduced likelihood for any hydraulic fracturing impact on the overlying streams.

Instrumentation within the TBM, supplemented by geotechnical and structural instrumentation and a real-time monitoring program, are used to confirm excavation and grout volumes, as well as the general ground support performance of the TBM. Experience and qualifications of the contractor plays a major role in maintaining TBM performance. A rigorous pre-qualification process for potential contractors will be implemented for the project to evaluate a firm's experience and qualifications, as well as the qualifications of the TBM operator and other proposed key staff.

- S2-3 Mechanized tunneling techniques make use of products of widely differing physical and chemical natures that can all be labelled as “conditioning fluids or slurries.” These products may be introduced within the TBM to mix with the excavated material to form “muck,” which is then transported outside the machine via a conveyor or pipe system, or injected at the TBM face to address ground settlement, as described in response to comment S2-2.

Conditioning fluids or slurries that may be present in muck include: water; bentonites, including bentonite slurry; polymers, which include natural polymers (starch, guar gum, etc.), modified natural or semi-synthetic polymers (CMC [carboxymethylcellulose], etc.), synthetic polymers (polyacrylamides, polyacrylates, etc.), and foam (a surfactant). Material transported outside the TBM and through the partially constructed tunnel would be contained within a designated construction staging area (CSA), as shown on Figure 5-2, *Proposed Mabury Road and U.S. 101 Construction Staging Areas (Revised)*, if the material is transported to the East Tunnel Portal or on Figure 5-11, *Proposed Newhall Maintenance Facility Construction Staging Area*, if the material is transported to the West Tunnel Portal. Note that if the material is transported to the East Tunnel Portal, the elongated section of the CSA near Lower Silver Creek would not be used for storage or processing of muck. For either CSA location, construction best management practices, pursuant to the Construction General Permit and VTA's MS4 permit, to protect water quality would be implemented to ensure that no materials would enter directly into a stream or indirectly into a stream through the storm drain system.

For an EPB TBM, a wide range of conditioning agents may be used including water, bentonite slurry, various polymer materials, and foams. These materials are introduced at the TBM face, in the working chamber, or in the screw conveyor. TBMs include the technology to introduce any additives in controlled amounts, ensuring that they are sufficiently mixed with the soil and appropriately selected for the types of soil encountered. These added conditioning agents become part of the excavated material that is transported outside the machine.

For a slurry TBM, bentonite slurries may be used, with polymer additives if necessary, to enhance formation of a filter cake in noncohesive soils, as well as to maintain dispersion and provide lubrication. Polymer flocculating agents may be added to the excavated material to improve performance of the separation plant.

It is not anticipated that any conditioning fluids or slurries that are mixed with the excavated material or introduced at the TBM face will enter a stream channel while processed or stored at a CSA or by means of hydraulic fracking as the TBM moves past overlying streams.

- S2-4 All CSAs would be on existing impervious surface except for the Newhall Maintenance Facility, which would be on dirt lots with ruderal vegetation that is surrounded by residential, transportation, and commercial development. The CSAs adjacent to streams are shown on Figure 5-2, *Proposed Mabury Road and U.S. 101 Construction Staging Areas (Revised)*, near Lower Silver Creek and on Figure 5-8, *Proposed Diridon Station South Option Construction Staging Areas*, near Los Gatos Creek under the Diridon Station South Option. These CSAs will not encroach upon or affect the riparian vegetation and/or the streams, as both CSAs will be restricted to the existing paved parking lots or VTA right-of-way and beyond the top of bank and outside the edge of riparian habitat. In addition, Mitigation Measure BIO-CNST-D: Protect Riparian Habitat, described in Chapter 5, Section 5.5.4, *Biological Resources and Wetlands*, will be implemented to protect riparian habitat during construction. Also note that no additional stormwater outfall structures are proposed. The project would not divert or obstruct the natural flow of, or substantially change or use any material from, any of the streams that cross the project alignment. The project would also not deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any of these streams. See also responses to comments S2-2 and S2-3 regarding impacts on waters of the U.S., rivers, streams, or lakes.
- S2-5 See responses to comments S2-2 through S2-4.
- S2-6 See response to comment S2-2. Also see Volume I, Section 2.2.2.1, *Alignment and Station Features by City*, in the SEIS/SEIR.
- S2-7 As described in Sections 4.8 and 6.8, *Geology, Soils, and Seismicity*, the specific soil types and their attributes in the project, including the locations where tunnel boring would occur, are presented in the *BART Silicon Valley Phase II Santa Clara Extension Project Geotechnical Memorandum*.⁸ As described in the memorandum, the BART Phase 2 Project is underlain by a variety of alluvial deposits. The alluvium has been identified as Holocene age alluvial fan deposits

⁸ Available on VTA's website at: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/06_Geotechnical%20Memorandum.pdf.

(Qf and Qhf), fine-grained Holocene alluvial fan deposits (Qhff), Holocene alluvial fan levee deposits (Qhl), Holocene Stream Channel Deposits (Qhc), and Historic Artificial Channel Deposits (ac). Fine-grained Holocene alluvial fan deposits (Qhff) occur on the flatter distal portions of fans and consist primarily of silt and clay-rich sediments with interbedded layers of coarser sand and occasional gravel. The Holocene alluvial fan levee deposits (Qhl) consist of silt, sand, and clay. The bedrock buried at great depth beneath the BART Extension is presumed to be the Franciscan Complex of the upper Jurassic to Cretaceous age.

In regards to the waterways, the Geotechnical Memorandum identifies that the Lower Silver Creek (referred to in the memorandum as “a relatively narrow channel [less than 100 feet wide] channel”) is mapped as Artificial Stream Channel (historic) (ac), a type described as modified stream channels including straightened or realigned channels, flood control channels, and concrete canals. Deposits within artificial channels can range from almost none in some concrete canals, to significant thicknesses of loose, unconsolidated sand, gravel and cobbles, similar to deposits of modern stream channel deposits (Qhc).

Coyote Creek (referred to in the Geotechnical Memorandum as “a relatively narrow stream channel [less than 140 feet wide, located just east of 17th Street]”), Guadalupe River, and Los Gatos Creek are mapped as Historic Stream Channel Deposits (Qhc), a type described as fluvial deposits within active, natural stream channels. Materials consist of loose, unconsolidated, poorly to well sorted sand, gravel and cobbles, with minor silt and clay. These deposits are reworked by frequent flooding and exhibit no soil development. These deposits, like most other alluvial deposits, are fine downstream (i.e., sediment is coarser upstream). The analysis presented in the SEIS/SEIR takes into account these soils characteristics.

See response to comment S2-2 for a discussion of ground settlement and hydraulic fracking related to construction of the tunnel.

[http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/06_Geotechnical Memorandum.pdf](http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/06_Geotechnical_Memorandum.pdf)

- S2-8 See responses to comments S2-2 and S2-3.
- S2-9 See responses to comments S2-2 through S2-4.
- S2-10 As requested, California Natural Diversity Database entries will be submitted to CDFW if and when special-status species are observed during field surveys.
- S2-11 VTA will pay the CDFW fee when the CEQA Notice of Determination is filed with the County of Santa Clara, Office of the County Clerk-Recorder, as required.
- S2-12 VTA appreciates CDFW’s thoughtful review of the Draft SEIS/SEIR and the associated comments.



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

Memorandum

Date: February 21, 2017
To: All Reviewing Agencies
From: Scott Morgan, Director
Re: SCH # 2002022004
VTA's BART Silicon Valley - Phase II Extension Project

Pursuant to the attached letter, the Lead Agency has *extended* the review period for the above referenced project to **March 6, 2017** to accommodate the review process. All other project information remains the same.

S3-1

cc: Tom Fitzwater
Santa Clara Valley Transportation Authority
3331 North 1st Street, Building B
San Jose, CA 95134



30100001 2/21/17 Planning & Research

FEB 21 2017

STATE CLEARINGHOUSE

Solutions that move you

**Notice of Extension of Public Comment Period to Monday, March 6, 2017
For VTA's BART Silicon Valley Phase II Extension Project
Draft Supplemental Environmental Impact Statement/
Draft Subsequent Environmental Impact Report and Draft 4(f) Evaluation**

Project Overview

The Federal Transit Administration (FTA) and the Santa Clara Valley Transportation Authority (VTA) previously released the Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) for public review and comment for the proposed construction of VTA's BART Silicon Valley Phase II Extension Project, an approximately 6-mile extension of the Bay Area Rapid Transit (BART) system from the Berryessa BART Station (under construction) in San Jose to the City of Santa Clara. The Project would include four stations: the Alum Rock/28th Street, Downtown San Jose, Diridon, and Santa Clara Stations. The comment period has been extended from February 20, 2017 to **March 6, 2017**. The Draft SEIS/SEIR and supporting documentation are available on the project website: <http://www.vta.org/bart/environmentaldocumentsphaseII>.

How To Submit Comments:

Written comments will be accepted until **March 6, 2017** and may be submitted via mail or email:

Mail: Tom Fitzwater, BART Silicon Valley Environmental Planning Manager
VTA Environmental Programs & Resources Management, Building B-2
3331 North First Street, San Jose, CA 95134

Email: BARTPhase2EIS-EIR@vta.org

Contact VTA Community Outreach at (408) 321-7575, TTY (408) 321-2330, for additional information.

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2002022004

Project Title: VTA's BART Silicon Valley - Phase II Extension Project

Lead Agency: Santa Clara Valley Transportation Authority and FTA Contact Person: Tom Fitzwater
 Mailing Address: 3331 North First Street, Building B Phone: (408) 321-5705
 City: San Jose Zip: 95134 County: Santa Clara

Project Location: County: Santa Clara City/Nearest Community: San Jose and Santa Clara
 Cross Streets: several over 6 miles Zip Code: several
 Longitude/Latitude (degrees, minutes and seconds): _____ " N / _____ " W Total Acres: _____
 Assessor's Parcel No.: _____ Section: _____ Twp.: _____ Range: _____ Base: _____
 Within 2 Miles: State Hwy #: US101, SR82, SR87, 1880 Waterways: Silver, Coyote, and Los Gatos Creeks, Guadalupe River
 Airports: San Jose Intl Airport Railways: Caltrain, UPRR, Amtrak Schools: several

Document Type:

CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Cons Supplement/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) 2002022004 Draft EIS Other: _____
 Mit Neg Dec Other: _____

Local Action Type:

General Plan Update Specific Plan Rezone Assessment
 General Plan Amendment Master Plan Prezone Regional
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other: Transportation

Development Type:

Residential: Units ~500 Acres _____
 Office: Sq.ft. ~2 ml Acres _____ Employees _____
 Commercial: Sq.ft. ~300k Acres _____ Employees _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____
 Educational: _____
 Recreational: _____
 Water Facilities: Type _____ MGD _____
 Transportation: Type Heavy Rail Extension
 Mining: Mineral _____
 Power: Type _____ MW
 Waste Treatment: Type _____ MGD
 Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:

Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____

Present Land Use/Zoning/General Plan Designation:

Presently heavy and light industrial, commercial, parking and vacant land uses. Zoning and general plan designations vary.

Project Description: (please use a separate page if necessary)
 VTA's BART Extension would extend the BART system from the Phase I terminus in the Berryessa neighborhood of San Jose for approximately 6 miles through central San Jose and terminate in the City of Santa Clara. The alignment would include an approximately 5-mile long tunnel, or subway, through downtown San Jose and an end-of-the-line maintenance facility. Four stations are under consideration: Alum Rock/28th Street, Downtown San Jose, Diridon, and Santa Clara. Depending upon funding availability, initial revenue service on the BART Extension Alternative is targeted to begin in late 2025/2026. VTA is proposing to construct Transit-Oriented Joint Development (office, retail, and residential land uses) at the four BART stations (Alum Rock/28th Street, Downtown San Jose, Diridon, and Santa Clara) and at two mid-tunnel ventilation structure locations.

State Clearinghouse Contact:

(916) 445-0613

State Review Began: 12-27-2016

SCH COMPLIANCE 3-06-2017

Note: Extended per Lead

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#: 2002022004

Please forward late comments directly to the Lead Agency

AQMD/APCD 20/2

(Resources: 12/31)

Project Sent to the following State Agencies

<input checked="" type="checkbox"/> Resources	State/Consumer Svcs
<input type="checkbox"/> Boating & Waterways	General Services
<input type="checkbox"/> Coastal Comm	Cal EPA
<input type="checkbox"/> Colorado Rvr Bd	ARB: Airport & Freight
<input type="checkbox"/> Conservation	<input checked="" type="checkbox"/> ARB: Transportation Projects
<input checked="" type="checkbox"/> CDFW # 3	ARB: Major Industrial/Energy
<input type="checkbox"/> Delta Protection Comm	SWRCB: Div. of Drinking Water
<input type="checkbox"/> Cal Fire	SWRCB: Div. Drinking Wtr #
<input type="checkbox"/> Historic Preservation	SWRCB: Div. Financial Assist.
<input checked="" type="checkbox"/> Parks & Rec	SWRCB: Wtr Quality
<input type="checkbox"/> Central Valley Flood Prot.	SWRCB: Wtr Rights
<input checked="" type="checkbox"/> Bay Cons & Dev Comm.	<input checked="" type="checkbox"/> Reg. WQCB # 2
<input type="checkbox"/> DWR	Toxic Sub Ctrl-CTC
<input type="checkbox"/> OES	Yth/Adlt Corrections
<input type="checkbox"/> Resources, Recycl. & Recovery	Corrections
CalSTA	
<input type="checkbox"/> Aeronautics	Independent Comm
<input type="checkbox"/> CHP	Energy Commission
<input checked="" type="checkbox"/> Caltrans # 4	<input checked="" type="checkbox"/> NAHC
<input type="checkbox"/> Trans Planning	<input checked="" type="checkbox"/> Public Utilities Comm
	State Lands Comm
	Tahoe Rgl Plan Agency
Other	
<input type="checkbox"/> HCD	
<input type="checkbox"/> Food & Agriculture	
	Conservancy
	Other: _____

Response to Comment Letter S3

California State Clearinghouse, Office of Planning and Research – 1st Letter

- S3-1 California State Clearinghouse's acknowledgement of the extension of the Draft SEIS/SEIR public review period is noted.



HIGH-SPEED RAIL: **CONNECTING AND TRANSFORMING CALIFORNIA**

March 3, 2017

Tom Fitzwater
 BART Silicon Valley Environmental Planning Manager
 VTA Environmental Programs & Resources Management,
 3331 North First Street, Building B-2
 San Jose, California 95134

Dear Mr. Fitzwater:

Thank you for notifying the California High Speed Rail Authority (Authority) of the preparation of the Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report for Valley Transportation Authority's (VTA)/BART Silicon Valley Phase II Extension Project. We support VTA and BART's goals to improve public transit service and access throughout the Bay Area to major Santa Clara County employment and activity centers by extending BART's regional rail network to downtown San Jose and the City of Santa Clara. The Authority is committed to working in partnership with VTA, BART, Caltrain and the City of San Jose through the Diridon Station Intermodal Working Group and other technical coordination meetings to share information and coordinate all phases of project implementation for the BART Phase II extension project and initiation of high speed rail service to the Bay Area at San Jose Diridon Station by 2025. The following 21 points are the Authority's comments specific to the Supplemental Environmental Impact Statement (SEIS) and Supplemental Environmental Impact Report (SEIR).

In addition, in an effort to ensure ongoing coordination, we have established regular technical meetings with the VTA/BART technical team lead by Leyla Hedayat. Coordination on project implementation, design, operations and construction should occur during these technical team meetings.

On-Going Coordination

As you are aware the Authority is in the process of preparing environmental documents and preliminary engineering for the implementation of high speed rail through San Jose, connecting Merced, in the Central Valley, to the Transbay Transit Center in San Francisco. The Authority's 2016 Business Plan assumes high speed rail operations to San Jose by 2025, with construction beginning in 2020. As both our projects are on a similar trajectory for implementation, on-going coordination is critical in the planning/development phase, preliminary and final design, construction staging and project construction.

S4-1

Areas of on-going coordination for our two projects are grouped into the following areas:

Collaboration Diversity Excellence Innovation Safety Sustainability



Design and Engineering Layout Coordination

- | | |
|--|------|
| 1. The proposed location, size and configuration of BART's tunnel(s) and station at San Jose Diridon Station with respect to potential HSR San Jose Station building improvements and potential HSR Diridon Station aerial approach structure foundations. | S4-2 |
| 2. The proposed location, size and configuration of BART's tunnel(s) under Hedding Street with respect to potential HSR reconstruction of the Hedding Street overcrossing to an undercrossing and potential HSR Diridon Station aerial approach structure foundations. | S4-3 |
| 3. The proposed location of the BART west portal, with respect to potential HSR adjustments to existing track infrastructure, and potential HSR Diridon Station aerial approach structures. | S4-4 |
| 4. The layout of the proposed BART Newhall Maintenance Facility and Santa Clara Station with respect to potential HSR adjustments to existing track infrastructure and Diridon Station approach structures. | S4-5 |
| 5. The proposed location of the BART track with respect to potential HSR reconstruction of the De La Cruz Boulevard overcrossing to an undercrossing and potential HSR Diridon Station aerial approach structure foundations. | S4-6 |

Diridon Station North and Diridon Station South Facilities Coordination

- | | |
|---|-------|
| 6. Portal locations for access to and from below grade platform and concourse levels. | S4-7 |
| 7. Intermodal passenger flows and pedestrian connections to the Diridon Caltrain station, VTA bus transit center and the VTA Diridon light rail station. | S4-8 |
| 8. Prioritize ease of access for pedestrians, cyclists and transit vehicles, and seamless intermodal connections. | S4-9 |
| 9. Roadway modifications and streetscape improvements along Santa Clara Street and Cahill Street. | S4-10 |
| 10. Reconfiguration of existing VTA bus transit center for better access and circulation to accommodate projected bus and shuttle transfers to and from the BART station and HSR. | S4-11 |
| 11. Above ground system facilities including traction power substations (TPSS), auxiliary power station substation, ventilation facilities, and ventilation shafts, including access to above ground facilities and parking areas, for service vehicles with restricted access for all transit providers. | S4-12 |
| 12. Short term and long-term multimodal access and parking in the station area. | S4-13 |

Construction Coordination

- 13. Temporary construction areas, separation of the track clearance envelope (TCE) areas for concurrent, yet independent, construction contract work. | S4-14
- 14. Street closures and vehicular access (maintain truck haul routes to and from the Diridon station). | S4-15
- 15. Location of temporary transit facilities during construction. | S4-16
- 16. Protection of historic structures. | S4-17

Sustainability Coordination

- 17. Continue to align BART and HSR sustainability priorities to reduce energy consumption, GHG-emissions and air-emissions. | S4-18
- 18. Maximize additional joint agency benefits in construction practices and sustainability targets. | S4-19
- 19. Prioritize ease of access for pedestrians, cyclists, and transit vehicles, as well as seamless intermodal connections. | S4-20
- 20. Collaborate with HSR to support zero net energy stations and operations with 100% renewable energy. | S4-21
- 21. Share best practices with HSR to lower greenhouse gas emissions by requesting contractors meet sustainability performance standards and submit Environmental Product Declarations (EPD's) for all steel and concrete products. | S4-22

Thank you for the opportunity to comment on your Phase II SEIR-SEIS. The Authority looks forward to working closely with the VTA/BART team in these coordination areas as both projects move towards implementation.

Sincerely,



Ben Tripousis
Northern California Regional Director
California High Speed Rail Authority

Response to Comment Letter S4

California High Speed Rail Authority (CHSRA)

- S4-1 This is a general, introductory comment. Specific issues requiring ongoing coordination between VTA and the CHSRA raised in the subsequent comments are responded to below. Coordination meetings between VTA and CHSRA are listed in Section 10.6 in the SEIS/SEIR. Meetings were conducted directly with the CHSRA as well as through their participation on the Diridon Interagency Working Group, Diridon Operators Working Group, and the Executive Level Diridon Interagency Working Group Meetings.
- S4-2 VTA and the CHSRA have been and will continue to meet on a regular basis in order to coordinate the design and implementation of the respective capital projects at Diridon Station, the crossings at Hedding Street and De La Cruz Boulevard, and the BART west portal and placement of high-speed rail (HSR) structures at this location. VTA and the CHSRA will continue to meet regularly in order to coordinate the respective capital projects during both construction and operations. VTA is leading the San Jose Diridon Transportation Facilities Master Plan with the participation of all of the current and future transit operators, including CHSRA. As part of the San Jose Diridon Transportation Facilities Master Plan, VTA is planning for the long-term facility needs and multi-modal access needs to ensure the station provides seamless intermodal connectivity for all of the transit modes.
- S4-3 See response to comment S4-2.
- S4-4 See response to comment S4-2.
- S4-5 See response to comment S4-2.
- S4-6 See response to comment S4-2.
- S4-7 See response to comment S4-2.
- S4-8 See response to comment S4-2.
- S4-9 See response to comment S4-2.
- S4-10 See response to comment S4-2.
- S4-11 See response to comment S4-2.
- S4-12 See response to comment S4-2.
- S4-13 Please refer to response to comments S4-2 and L3-7.

- S4-14 VTA and the CHSRA will continue to meet regularly in order to coordinate construction activities at the appropriate time. VTA will coordinate with the CHSRA regarding construction-period street closures, vehicular access on truck haul routes, and location of temporary transit facilities, should construction for the BART Extension and HSR San Jose to Merced projects occur at the same time. Also refer to Master Response 2, *Diridon Station Short-Term Parking*.
- S4-15 See response to comment S4-14.
- S4-16 See response to comment S4-14.
- S4-17 Sections 4.5, Section 5.5.6, and 6.6, *Cultural Resources*, describe the potential effects of the project on historic resources, properties, or districts during construction and operation and all minimization measures. VTA and the CHSRA will continue to meet regularly to coordinate the protection of historic resources should construction for the BART Extension and HSR San Jose to Merced projects occur at the same time.
- S4-18 VTA's Board of Directors has adopted a Sustainability Program with a goal to “proactively reduce the consumption of natural resources, the creation of greenhouse gases, and the generation of pollution in the provision of public transportation services.” This applies to all VTA projects, including the BART Extension. Volume I, Section 2.2.2.3, *Sustainability Strategies*, discusses the features that VTA in consultation with BART intends to incorporate into the construction and demolition and design of the project. VTA supports coordination with CHSRA on sustainability issues to achieve this sustainability goal.
- S4-19 See response to comment S4-18.
- S4-20 See response to comment S4-2.
- S4-21 See response to comment S4-18.
- S4-22 See response to comment S4-18.



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

UTA ENVIRONMENTAL

March 7, 2017

Tom Fitzwater
Santa Clara Valley Transportation Authority
3331 North 1st Street, Building B
San Jose, CA 95134

2017MAR09 pm02:37

Subject: VTA's BART Silicon Valley - Phase II Extension Project
SCH#: 2002022004

Dear Tom Fitzwater:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on March 6, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures

cc: Resources Agency

S5-1

**Document Details Report
State Clearinghouse Data Base**

SCH# 2002022004
Project Title VTA's BART Silicon Valley - Phase II Extension Project
Lead Agency Santa Clara Valley Transportation Authority

Type EIR Draft EIR
Description Note: Extended Per Lead

VTA's BART Extension would extend the BART system from the phase I terminus in the Berryessa neighborhood of San Jose for approximately 6 miles through central San Jose and terminate in Santa Clara. The alignment would include an approximately 5-mile long tunnel, or subway, through downtown San Jose and an end of the line maintenance facility. Four stations are under consideration: Alum Rock/28th St, Downtown San Jose, Diridon, and Santa Clara. Depending upon funding availability, initial revenue service on the BART Extension alternative is targeted to begin in late 2025/2026. VTA is proposing to construct transit-oriented joint development at the four BART stations and at two mid-tunnel ventilation structure locations.

Lead Agency Contact

Name Tom Fitzwater
Agency Santa Clara Valley Transportation Authority
Phone 408 321 5705 **Fax**
email
Address 3331 North 1st Street, Building B
City San Jose **State** CA **Zip** 95134

Project Location

County Santa Clara, Alameda
City San Jose, Santa Clara
Region
Lat / Long
Cross Streets Multiple
Parcel No.
Township

	Range	Section	Base
--	--------------	----------------	-------------

Proximity to:

Highways US 101, SR 87, I-880, SR 82
Airports Mineta San Jose Int'l Airport
Railways UPRR, Caltrain, Amtrak
Waterways multiple
Schools multiple
Land Use presently heavy and light industrial, commercial, parking and vacant land uses. zoning and GP vary.

Project Issues Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual; Air Quality; Fiscal Impacts; Sewer Capacity; Solid Waste

Reviewing Agencies Resources Agency; Cal Fire; Department of Fish and Wildlife, Region 3; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 4; Regional Water Quality Control Board, Region 2; Air Resources Board, Transportation Projects; Native American Heritage Commission; Public Utilities Commission

Document Details Report
State Clearinghouse Data Base

Date Received 12/27/2016 *Start of Review* 12/27/2016 *End of Review* 03/06/2017



State of California – The Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Bay Delta Region
 7329 Silverado Trail
 Napa, CA 94558
 (707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
 CHARLTON H. BONHAM, Director



*Clair
 2/16/17
 G*

February 17, 2017

Governor's Office of Planning & Research
 FEB 17 2017
 STATE CLEARINGHOUSE

Mr. Tom Fitzwater, SVRT Environmental Planning Manager
 Santa Clara Valley Transportation Authority
 Environmental Programs & Resources Management, Building B-2
 3331 North First Street, San Jose, CA 95134
BARTPhase2EIS-EIR@vta.org

Dear Mr. Fitzwater:

Subject: Santa Clara Valley Transportation Authority Bay Area Rapid Transit (BART)
 Silicon Valley - Phase II Extension Project (Project) – DRAFT SUPPLEMENTAL
 ENVIRONMENTAL IMPACT REPORT AND ENVIRONMENTAL IMPACT
 STUDY (DSEIR/DSEIS), SCH #2002022004

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DSEIR/DSEIS from Santa Clara Valley Transportation Authority (VTA) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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, we appreciate 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 the 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 and Game 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 and Game Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed

¹ 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.

Mr. Tom Fitzwater,
February 17, 2017
Page 2

may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Santa Clara Valley Transportation Authority (VTA)

Objective: The objective of the Project is to build a 6-mile extension of the BART system from Berryessa Station, through downtown San Jose, and to the Santa Clara Caltrain Station. The alignment would include an approximate 5-mile tunnel, or subway, through downtown San Jose. There are two tunnel construction methods that are evaluated in the DSEIR/DSEIS: the Twin-Bore Option (two 20-foot-diameter tunnels) and the Single-Bore Option (one 45-foot-diameter tunnel). Tunneling will occur below Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek.

Timeframe: Depending upon funding availability, initial revenue service on the BART Extension is targeted to begin in late 2025/2026. The Project would take approximately eight years for construction, testing, and start-up activities.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the VTA in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Chapter 6 CEQA Alternatives Analysis of Construction and Operation, Section 6.4 Biological Resources and Wetlands, Section 6.4.2.3 Jurisdictional Features, Fish and Game Code Section 1602 Jurisdiction

Issues and Impacts Discussion:

Within this section, it is stated that the Project facilities would be underground and would not affect the bed, channel, or bank of streams or associated riparian vegetation and, therefore, the Project is not subject to CDFW's Section 1602 jurisdiction.

As indicated above, under *Objective*, the Project would include tunnel construction under Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek.

It is generally stated, in Section 6.4.2.3 Jurisdictional Features of the DSEIR/DSEIS, that the tunnels would be located 20 to 50 feet below the stream beds. More specifically, it is stated that the Twin-Bore Option would pass approximately 25 feet below Coyote Creek and approximately 20 feet below Los Gatos Creek (Chapter 4 NEPA Alternatives Analysis of Operations, 4.17 Water Resources, Water Quality, and Floodplains, 4.17.4.2 BART Extension Alternative Surface Waters).

The primary concern of CDFW with regards to the tunneling depth is the potential for hydraulic fracture or other type of destabilization of the soils within the area between the stream beds and

Response to Comment Letter S5

California State Clearinghouse, Office of Planning and Research – 2nd Letter

- S5-1 See the individual responses under *Response to Comment Letter S2* for responses to the concerns presented in the California Department of Fish and Wildlife, Bay Delta Region letter.

DEPARTMENT OF TRANSPORTATION

DISTRICT 4

P.O. BOX 23660

OAKLAND, CA 94623-0660

PHONE (510) 286-5528

FAX (510) 286-5559

TTY 711

www.dot.ca.gov



*Serious Drought.
Help save water!*

March 28, 2017

04-SCL-2017-00104
SCLGEN120
SCH# 2002022004

Mr. Tom Fitzwater, SVRT Environmental Planning Manger
Santa Clara Valley Transportation Authority
Environmental Programs & Resources Management Building B-2
3331 North First Street
San Jose, CA 95134

Dear Mr. Fitzwater:

VTA's BART Silicon Valley Phase II Extension Project – Draft Supplemental Environmental Impact Statement/Draft Subsequent Environmental Impact Report and Draft 4(f) Evaluation

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. In tandem with the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy (SCS), Caltrans new mission signals a modernization of our approach to evaluating and mitigating impacts to the State Transportation Network (STN). Caltrans Strategic Management Plan aims to reduce vehicle miles traveled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the Draft Supplemental Environmental Impact Statement/Draft Subsequent Environmental Impact Report and Draft 4(f) Evaluation (collectively, DEIS/DEIR). Please also refer to the previous comment letters on this project, which are incorporated herein. Caltrans' review of the DEIS/DEIR and the following comments are limited to the locations where the project crosses State right-of-way (ROW). Additional comments may be forthcoming.

Project Understanding

The proposed project stretches 16 miles from the Bay Area Rapid Transit (BART) Warm Springs Station in Alameda County into Santa Clara County.

Under the National Environmental Protection Act (NEPA), the BART Extension Alternative consists of a 6-mile extension of the BART system from the Berryessa BART Station (currently under construction) through downtown San Jose to the Santa Clara Caltrain Station. The alignment would include an approximately 5-mile tunnel, or subway, through downtown San Jose. Four stations are under consideration: Alum Rock/28th Street, Downtown San Jose, Diridon, and Santa Clara. Two options are currently under consideration for the location of the

S6-1

Downtown San Jose Station (East and West) and for Diridon Station (North and South). Two tunnel construction methodology options, the Twin-Bore Option (two 20-foot-diameter tunnels) and the Single-Bore Option (one 45-foot-diameter tunnel), are under consideration. Depending upon funding availability, initial revenue service on the BART Extension is targeted to begin in late 2025/2026.

S6-1,
cont.

Under the California Environmental Quality Act (CEQA), the BART Extension Alternative is also the same as the NEPA BART Extension Alternative described above. The additional CEQA BART Extension with Transit-Oriented Joint Development (TOJD) Alternative consists of the 6-mile BART Extension as described above, in addition to TOJD at the four BART stations and two mid-tunnel ventilation structure sites. The BART Extension with TOJD Alternative's TOJD component does not involve a federal action or federal funding and is evaluated only under CEQA. The TOJD has independent utility and is included to support local and regional land use planning.

Lead Agency

As the lead agency, the Santa Clara Valley Transportation Authority (VTA) is responsible for all project mitigation, including any needed improvements to the STN and for VMT reduction. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

S6-2

Transportation Management Plan

If it is determined that traffic restrictions and detours may affect State highways, a Transportation Management Plan (TMP) will be required for approval by Caltrans prior to construction. These must be prepared in accordance with Caltrans' *TMP Guidelines*. Further information is available for download at the following web address:
www.dot.ca.gov/hq/traffops/trafmgmt/tmp_lcs/index.htm.

S6-3

Please ensure that such plans are also prepared in accordance with the TMP requirements of the corresponding jurisdictions. For further TMP assistance, please contact the Caltrans District 4 Office of Traffic Management Operations at (510) 286-4579.

Encroachment Permit

An encroachment permit will be required for work within State ROW. Depending on the complexity and cost of the project, a Project Initiation Document (PID) and additional Caltrans oversight might be necessary. A maintenance agreement may also be needed prior to the implementation of the project.

S6-4

If the traffic impact mitigation will result in more than \$3 million in construction costs within State ROW, Caltrans will require a Project Study Report (PSR) and assign a Project Manager to oversee the project development process. If the cost for construction of traffic impact mitigation within the State ROW falls between \$1 million and \$3 million, a Permit Engineers Evaluation Report (PEER) will be the process for project approval. An application for an encroachment permit from Caltrans will be needed to initiate the review and approval process. The

S6-5

Mr. Tom Fitzwater/VTA

March 28, 2017

Page 3

encroachment permit application will need to include an engineer's estimate of construction costs within the State ROW.

S6-5,
cont.

Please be advised that work or traffic control up to \$1 million in cost that encroaches onto the State ROW will require an encroachment permit from Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See the website linked below for more information:

S6-6

<http://www.dot.ca.gov/hq/traffops/developserv/permits>.

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or brian.ashurst@dot.ca.gov.

Sincerely,



PATRICIA MAURICE

District Branch Chief

Local Development - Intergovernmental Review

c: Scott Morgan, State Clearinghouse – electronic copy
Robert Swierk, VTA – electronic copy

Response to Comment Letter S6

California Department of Transportation

- S6-1 This is a general, introductory comment. Specific issues raised at the locations where the project crosses the State ROW in the subsequent comments are responded to in each individual response to comment below.
- S6-2 As described in Chapter 3, *NEPA and CEQA Transportation Operation Analysis*, and Section 6.2, *Transportation*, there are no project mitigation measures or improvements proposed by the project that would occur within the State ROW. The mitigation measures included in the SEIS/SEIR identify the agency responsible for implementation, and whether the mitigation measures would be implemented during construction or operation. Wherever applicable, projects' fair share contribution has been noted.
- S6-3 As described in Mitigation Measure TRA-CNST-B: Develop and Implement a Construction Transportation Management Plan, described in Chapter 5, Section 5.5.1, *Construction Outreach Management Program*, VTA will develop and implement a Construction TMP to coordinate vehicle, bike, pedestrian, and public transportation circulation during construction. The project is not anticipated to require traffic restrictions and detours that would affect the State transportation network. However, as described in Mitigation Measure TRA-CNST-B, VTA will work with Caltrans and other local jurisdictions as required to develop TMPs to minimize adverse effects from construction. If needed, a TMP will be submitted to Caltrans for approval prior to construction as part of the encroachment permit process.
- Table 2-4, *Required Permits and Approvals*, notes that VTA will seek approval of plans for crossings under U.S. 101, SR-82, SR-87, and I-880 from Caltrans. Additionally, encroachment permits will be obtained for any work or traffic control with the State ROW.
- S6-4 As noted in Table 2-4, *Required Permits and Approvals*, encroachment permits will be obtained for any work or traffic control with the State ROW. VTA does not anticipate the need for any maintenance agreements with Caltrans.
- S6-5 As described in Chapter 3, *NEPA and CEQA Transportation Operation Analysis*, and Section 6.2, *Transportation*, there are no traffic mitigation measures identified for the project that would occur within the State ROW.
- S6-6 As noted in Table 2-4, *Required Permits and Approvals*, encroachment permits will be obtained for any work or traffic control within the State ROW. VTA will comply with Caltrans requirements for issuance of an encroachment permit. Mitigation Measure TRA-CNST-B: Develop and Implement a Construction

Transportation Management Plan, described in Chapter 5, Section 5.5.1, *Construction Outreach Management Program*, includes components that will reduce traffic circulation impacts during construction.