

RESOLUTION NO. 2015 – 03

BOARD OF DIRECTORS, PENINSULA CORRIDOR JOINT POWERS BOARD
STATE OF CALIFORNIA

**CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

WHEREAS, in 2009, the Peninsula Corridor Joint Powers Board (JPB) completed a Final Environmental Assessment/Environmental Impact Report (EA/EIR) for the Peninsula Corridor Electrification Project (Project); and

WHEREAS, based upon that document, the Federal Transit Administration issued a Finding of No Significant Impact (FONSI), which completed the federal environmental review for the Project in accordance with the National Environmental Policy Act (NEPA); and

WHEREAS, the JPB deferred finalizing the 2009 EA/EIR under the California Environmental Quality Act (CEQA), in part due to concerns regarding the proper consideration of the impacts of the California High Speed Rail Project, which had proposed to construct high speed rail facilities on the JPB's right of way; and

WHEREAS, the JPB has since entered into an agreement with the California High Speed Rail Authority (Authority), dated May 1, 2013, which clarifies the roles of the JPB as the lead agency for the Project, with the Authority continuing to serve as the lead agency for the statewide high speed rail project; and

WHEREAS, the JPB has prepared, in conformance with CEQA, a new Environmental Impact Report (EIR) for the Project; and

WHEREAS, the Project analyzed in the EIR consists of converting Caltrain from diesel-hauled to electrically-powered trains for service between the 4th and King Street

Station in San Francisco and the Tamien Station in San Jose, with the future impacts of the Authority's project being treated as cumulative impacts; and

WHEREAS, a Notice of Preparation for the Peninsula Corridor Electrification Project EIR was issued on January 31, 2013; and

WHEREAS, the Draft EIR was released on February 28, 2014 for a 60-day public review and comment period; and

WHEREAS, the JPB received comments from interested individuals, organizations and agencies on the Draft EIR, both in writing and at four duly-noticed public meetings; and

WHEREAS, responses to comments on the Draft EIR, as well as the revised EIR were prepared and released to the public on December 4, 2014 and minor errata to the EIR were prepared prior to January 8, 2014; and

WHEREAS, the Draft EIR, as revised, together with the responses to comments, and the errata, constitute the Final EIR on the Project; and

WHEREAS, the JPB has reviewed and considered the Final EIR for the Project and desires to certify the FEIR for the Project in conformance with CEQA law and Guidelines; and

WHEREAS, the JPB is a federally regulated rail carrier, subject to the jurisdiction of the Surface Transportation Board (STB) of the U.S. Department of Transportation; and

WHEREAS, the STB's jurisdiction derives from the provisions of the Interstate Commerce Commission Termination Act of 1995 (ICCTA). Under Section 10501 (b) of that Act, the STB's jurisdiction is exclusive for all transportation by rail carriers, including the facilities and structures that are an integral part of that transportation. Section 10501 (b) also expressly states that "the remedies provided under this part with respect

to regulation of rail transportation are exclusive and preempt the remedies provided under Federal and State law." The scope of that preemption as relates to CEQA and passenger rail projects in California is currently under court review. The JPB makes this certification without waiving the JPB's rights regarding the application of the ICCTA, including the defense that ICCTA and the STB's jurisdiction preempt CEQA's application to the Project and the JPB's decision(s) regarding it.

NOW THEREFORE BE IT RESOLVED, that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby certifies the Final Environmental Impact Report for the Peninsula Corridor Electrification Project (hereinafter "Project") based upon the following findings:

1. To the extent it is applicable to the Project, the Peninsula Corridor Joint Powers Board has complied with the requirements of the California Environmental Quality Act (Cal. Pub. Res. Code Sections 21000 et seq., hereinafter "CEQA") and the State CEQA Guidelines (Cal. Admin. Code Title 14, Sections 15000 et. seq., (hereinafter "CEQA Guidelines")).
2. Four duly-noticed public meetings were held on said Draft EIR in March and April, 2014, at which time opportunity for public comment was given, and public comment was received on the DEIR. The period for acceptance of written comments ended on April 29, 2014.
3. The JPB prepared responses to comments on environmental issues received at the public meetings and in writing during the 60-day public review period for the DEIR, prepared revisions to the text of the DEIR in response to comments received or based on additional information, and corrected errors in the DEIR. This material was presented in a Final EIR document, published on December 4, 2014, which was distributed to the Board and to all parties who commented on the DEIR, and was made available to others upon request at the JPB's offices. Minor errata to the EIR were prepared prior to January 8, 2014 and were also reviewed by the JPB.
4. The Final Environmental Impact Report, has been prepared by the JPB, as the lead agency, and consists of the DEIR, any comments received during the review process, any additional information that became available, and the responses to comments, all as required by law.

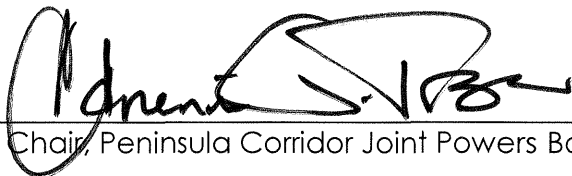
5. Project environmental files have been made available for review by the Board and the public. These files are available for public review at the Caltrain Headquarters in San Carlos, at 1250 San Carlos Avenue, and are part of the record before the Board.
6. At its meeting of January 8, 2015, the Board has reviewed and considered the Final EIR and hereby finds that the contents of said report and the procedures through which the Final EIR was prepared, publicized and reviewed are consistent with the provisions of CEQA and the CEQA Guidelines.
7. The Board has reviewed and considered the contents of the FEIR and hereby does find that the Final EIR reflects the independent judgment and analysis of the Peninsula Corridor Joint Powers Board, is adequate, accurate and objective, and that the Final EIR documents contain no significant new information to the DEIR that would require recirculation under CEQA Guideline Section 15088.5, and hereby does certify the completion of said Final Environmental Impact Report in compliance with CEQA and the CEQA Guidelines.
8. By this certification action, the Board does not waive the JPB's rights to the application of the ICCTA and does not waive any available defenses associated with the ICCTA and STB's jurisdiction, as discussed above.

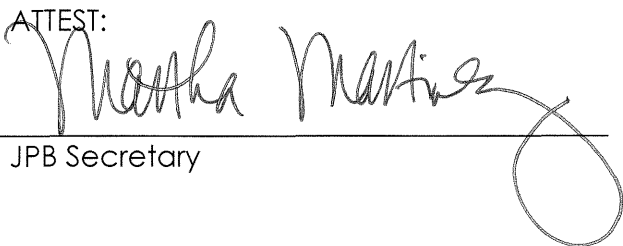
Regularly passed and adopted this 8th day of January, 2015 by the following vote:

AYES: CISNEROS, GEE, GUILBAULT, NOLAN
WOODWARD, YEAGER, TISSIER

NOES: NONE

ABSENT: COHEN, KALRA


Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary

2 **Introduction**

3 This Errata provides several additional responses to certain late comments on the Draft EIR, several
4 minor corrections to the Final EIR released on December 4, 2014, and provides additional material
5 for one of the Master Responses in the Final EIR concerning alternatives

6 **Additional Responses to Certain Late Comments**

7 While CEQA requires consideration of the substantive issues raised in any written comments
8 submitted during the CEQA review process, CEQA only requires the preparation of written
9 responses to substantive issues raised in written comment submitted during the specified review
10 period for the Draft EIR which was from February 28, 2014 to April 29, 2014.

11 Despite being under no obligation to respond in writing, the JPB has opted to respond to two late
12 comments: (1) from the Silicon Valley Law Group on behalf of San Jose Arena Management, LLC
13 (06/9/14) and (2) San Francisco Bay Conservation and Development Commission (06/30/14).
14 These late comment letters are included at the end of this Errata.

15 **Response to Silicon Valley Law Group June 9, 2014 comment submitted on**
16 **Behalf of San Jose Arena Management, LLC**

17 The late comment from the Silicon Valley Group dated June 9, 2014 submitted on behalf of San Jose
18 Arena Management LLC included technical comments dated June 5, 2014 from James Benshoof of
19 Wenck Associates, Inc. which presented information and assertions about the existing and future
20 parking demand data used for the EIR analysis in light of additional data presented in the comment
21 letter. As explained below, the Final EIR has accounted appropriately for existing and future parking
22 demand in the analysis. Thus, the late comment does not warrant any revisions to the Final EIR
23 analysis.

24 **Existing Parking Demand**

- 25 • The comment asserts that the existing Caltrain parking demand is 868 spaces, but aside from
26 citing that number there is no evidence presented to support that claim. They also do not cite
27 which days the surveys were conducted. It should be noted that October 2012 was when the
28 San Francisco Giants were in the baseball playoffs and in the World Series so many weekdays
29 would have not had “typical” parking demand due to games at AT&T Park. Also the stated
30 method used of just counting occupied spaces may also include other parking activity that is not
31 related to Caltrain, such as Capitol Corridor or ACE parking and other non-transit commute
32 parking in the vicinity of the station.
- 33 • In the analysis conducted by Fehr & Peers for the EIR, the existing parking demand is shown
34 based on Caltrain data, which notes that the existing parking supply of 576 spaces is 99%
35 occupied, resulting in a typical weekday demand of 572 spaces. The comment is correct that
36 this is just demand in the Caltrain lots.

- 1 • An alternative way to calculate existing demand would be to take the Fehr & Peers Mode of
2 Access survey results (described in Appendix D in the EIR) that show that 30 percent of morning
3 boardings at Diridon are park and ride related. Out of 1,950 AM peak boardings, this would
4 result in a total park and ride demand of 586 people (this total would be reduced further if one
5 were to assume that some of these people carpooled). This result is very close to demand of 572
6 spaces noted in Caltrain lot data. Since the Mode of Access study includes direct survey of
7 Caltrain riders, this data is specific to defining Caltrain parking demand.
- 8 • In any case, the existing demand doesn't technically matter for the calculation of project-level
9 demand, since the Fehr & Peers EIR analysis included other parking supply for the 2020 and
10 2040 analysis as discussed below.

11 **2020 and 2040 Parking Demand**

- 12 • The late comment letter notes that the 10-year Diridon Horizon Plan estimates parking demand
13 in about 2024 to be 1,240 spaces. It appears that the 1,240 number is simply based on the
14 assumed total parking supply around the station. The 10-year Diridon Plan states it assumes all
15 spaces will be 100 percent occupied, thus arriving at the 1,240 number. No apparent evidence is
16 provided to back the assumption that 100 percent of all available spaces will in fact be occupied.
- 17 • Regardless, the Diridon Station Area Plan (DSAP), which is described and incorporated by
18 reference in the PCEP Final EIR, states that future transit (not just Caltrain) demand will be
19 1,350 to 2,200 spaces, which is a higher number than 1,240 number cited in the late comment
20 letter. And thus, the PCEP Final EIR takes into account future higher demands for parking. As
21 described in the PCEP Final EIR [see Pages 4-137 and 4-138], the DSAP includes a strategy to
22 address not only transit parking demand as well as non-transit parking demand. Thus, while the
23 PCEP does not propose to add any additional parking facilities as part of the project or as
24 mitigation, the DSAP provides an overall approach to considering and addresses cumulative
25 parking taking into account planned development and planned transit and has provided for
26 meeting that demand.
- 27 • Regarding Fehr & Peers' analysis of future parking demand, which puts future 2020 Caltrain
28 demand at 1,002 spaces and 2040 Caltrain demand at 380 spaces, these are demands based on
29 Fehr & Peers extensive mode of access modeling for Caltrain that accounted for how changes in
30 station environments would affect access mode (i.e. that station area conditions will be different
31 in the future than they are today). This analysis is more detailed and rigorous than what was
32 done for the DSAP estimates of demand (Fehr & Peers confirmed this with the DSAP parking
33 consultant in summer 2014), so Fehr & Peers remains confident that the analysis approach to
34 calculating future Caltrain parking demand is sound.

35 **Response to San Francisco Bay Conservation and Development Commission** 36 **June 30, 2014 comment**

37 The late comment from the SF BCDC dated June 20, 2014 included comments concerning the BCDC's
38 jurisdictional authority, the San Francisco Bay Area Seaport Plan and concerns about the project's
39 impact to freight related to the Redwood City and San Francisco ports which fall under BCDC's
40 jurisdiction.

41 As explained below, the Final EIR has accounted appropriately for BCDC's jurisdictional authority
42 and adequately analyzed impacts related to freight. Thus, the late comment does not warrant any
43 further revisions to the Final EIR.

1 **BCDC Jurisdictional Authority**

2 The JPB is well aware of BCDC's jurisdictional authority in implementing the San Francisco Bay Plan
3 and in its role related to the federal Coastal Zone Management Act (CZMA). Table 2-6, in Chapter 2,
4 Project Description notes that the project is potentially subject to the state permitting authority of
5 the BCDC. BCDC authority is also described in Section 3.9.1.1 in Section 3.9, Hydrology and Water
6 Quality

7 However, as described in Chapter 1, Introduction section 1.5.12, of the Final EIR, the JPB is a
8 federally regulated rail carrier under the jurisdiction of the Surface Transportation Board (STB). Per
9 prior and recent rulings, rail projects under the jurisdiction of the STB can be exempt from certain
10 state and local environmental regulations, including permits.

11 Regardless of the application of state environmental permitting authority, the project would still be
12 subject to BCDC review of any federal permits, licenses or federal funding under the federal CZMA
13 for areas within the coastal zone, which includes a portion of the project adjacent to San Francisco
14 Bay as defined in the San Francisco Bay Plan. The JPB will obtain any necessary permits and/or
15 complete any CZMA consultation as necessary related to federal permits, licenses, or federal funding
16 and will work with BCDC to complete any necessary review and/or permit processes prior to
17 construction within BCDC jurisdictional areas.

18 **Project Impacts on Freight**

19 The JPB has carefully considered the potential impact of the Proposed Project on freight rail. The
20 Final EIR analyzes the following potential impacts to freight and reaches conclusions as summarized
21 below:

- 22 • Operational Hours – As explained in Volume II of the Final EIR, Chapter 3, Section 3.1.11, Master
23 Response 11 (Freight), the Draft EIR analyzed potential effects on freight operations assuming
24 temporal separation is required as temporal separation is part of the current FRA Waiver.
25 Pursuant to comments from freight operators and in light of recent discussions with vehicle
26 providers and in consideration of the current FRA rule-making for alternative compliant
27 vehicles, the JPB is now confident that the FRA Waiver requirement for temporal separation
28 with freight can be eliminated through either modification of the waiver or through the
29 compliance process in the new FRA rule-making. As such, freight operations should be able to
30 continue to operate in a manner that is more or less similar to present operations in terms of
31 operational hours.
- 32 • Vertical Clearances – As explained in Volume II of the Final EIR, Master Response 11 (Freight):
 - 33 ○ The JPB analyzed the vertical clearances with the PCEP and determined that with minor
34 modifications of several tunnels and lowering of the tracks at several bridges existing freight
35 equipment used on the Caltrain corridor can continue to be used on the corridor to serve
36 existing customers without any constraint. A table showing all of the existing vertical
37 clearances, the existing height of freight equipment, and the vertical clearances with the
38 Proposed Project have been added to the Final EIR.
 - 39 ○ For future cumulative conditions where freight operators may desire to operate higher
40 equipment than they are running now along the Caltrain corridor, there would be a minor
41 (~1') constraint on allowable equipment between Sunnyvale and Bayshore due to a low
42 point at the San Franciscquito Creek bridge. This is a historic bridge, and the EIR found that
43 replacing or major modification of the bridge is not feasible for the JPB because (1) the

1 overall cost of bridge replacement, estimated as \$48 million; (2) the need to construct a
2 shoofly track and temporary bridge while the current bridge is modified/replaced which
3 would have substantial disruption to both passenger and freight operations as well as
4 additional impact on the riparian corridor along the creek; and (3) the environmental and
5 operational disruption was not justified in order to provide a vertical clearance height that
6 is not being used by current freight traffic.

- 7 ○ Although the PCEP would limit the maximum vertical height of freight to approximately 19
8 feet (instead of a nominal 20.25' clearance for Plate H) between Sunnyvale and Bayshore,
9 which is a theoretical constraint to future freight operations, this is not considered a
10 significant physical environmental effect because (1) existing freight has been operating
11 successfully on this portion of the route using equipment less than 19 feet high; (2) the
12 additional freight that could utilize slightly higher freight railcars can in most cases be
13 placed in the 18.92' railcars in use on the corridor today; (3) a few additional railcars on
14 some freight consists would not substantially change environmental conditions for air
15 quality, greenhouse gas emissions or regional traffic. As a result, although the slight
16 lowering of allowable heights would limit the future ability to run Plate H from MP 41.4 to
17 MP 5.10, this is not considered to result in a significant physical environmental effect related
18 to air quality, greenhouse gas emissions or regional traffic.

- 19 ● Offsetting Benefit of Project Reductions in Criteria Pollutant and Greenhouse Gas Emissions: As
20 explained in Volume I of the Final EIR, Chapter 4, Pages 4-149 through 4-150, the EIR does
21 analyze the specific criteria pollutant and greenhouse gas emission that might result from
22 limited diversion of freight from rail to truck modes and demonstrates quantitatively that the
23 reduction of such emissions to the Proposed Project would be substantially larger than any such
24 secondary emission increases. The data on existing and potential future freight volumes for the
25 EIR was developed in consultation with freight owners and operators, including Union Pacific
26 and the Peninsula Freight Rail Users Group (PFRUG).

27 Regarding the BCDC's suggestion that the JPB should include infrastructure or operational
28 mitigation in anticipation of future changes in freight transport in terms of equipment height, under
29 CEQA, mitigation is only warranted where significant impacts are identified and where feasible
30 mitigation is available. As explained in the EIR, there are a number of existing constraints to vertical
31 clearance today including bridges, overcrossing, and tunnels. The Project is not required to remedy
32 existing constraints. As noted above, vertical clearance to accommodate higher freight equipment
33 than currently operating on the Caltrain Corridor is not feasible to provide at the San Franciscquito
34 Creek Bridge, which sets a fixed low-point for the portion of the corridor between Sunnyvale and
35 Bayshore. The EIR does include mitigation to address a low point in Santa Clara (the Lafayette
36 Pedestrian overcrossing) to maintain Plate H clearance for freight in that location. Thus, the EIR has
37 properly considered potential impacts and mitigation appropriately related to future vertical
38 clearances.

39 Regarding BCDC's suggestion that the Proposed Project should provide for expanded freight rail
40 storage for future rail use, the project would not eliminate use of any of the existing rail storage
41 areas by freight. Furthermore, the amount of freight occurring at present (3 round-trips a day
42 between Santa Clara and San Francisco) and projected to occur in the future along the Caltrain
43 Corridor (which was derived based on input from freight owners and operators), is not so large that
44 minor additional future potential needs for storage (due to the height limitation noted above for
45 equipment larger than today's equipment) would be expected to substantially change the needs for

1 rail car storage. Thus there is insufficient nexus or proportionality for consideration of such
2 provision as mitigation for a project significant effect.

3 The JPB works closely with freight owners and operators in the course of its responsibilities for the
4 Caltrain Corridor. The project has been designed to allow for continued freight use of the Caltrain
5 corridor and the JPB will continue to work with freight owners and operators on matters of concern
6 to these parties.

7 **Additional Response for Master Response 2 (Alternatives)**

8 The following additional response is added to Volume II, Chapter 3, Section 3.1.2, Master Response 2
9 (Alternatives) on page 3-11, following Lines 1 to 2, before “Level Boarding”:

10 **Natural Gas-Fueled Train Alternatives**

11 Regarding natural gas fueled train alternatives (including liquefied natural gas – LNG, compressed
12 natural gas CNG, or other natural-gas fueled variants), the JPB is not aware of any operating
13 commuter or intercity passenger rail systems operating using these fuels today and is not aware of
14 any proposals to use such trains by any operating commuter passenger railroad. Some of the Class I
15 freight railroads like BNSF are beginning to evaluate natural gas fueled freight locomotives¹. Such
16 systems, while potentially feasible in the future, have a number of operational, financial, regulatory
17 and mechanical challenges to them including the need to develop additional natural gas delivery
18 infrastructure, volatile natural gas prices and the need to develop new regulatory standards.
19 Natural gas fueled trains are only in their early stages of development for freight use.² Thus their
20 potential use for commuter rails at this time is speculative.

21 **Errata Changes to the Final EIR**

22 The following changes are made to the Final EIR document released on December 4, 2014. Changes
23 are noted in ~~strikeout~~ for deleted text and underline for added text:

24 *Mitigation Measure AES-2b, in Volume I, Chapter 3, Section 3.1, Aesthetics, Page 3.1-39, Lines 15*
25 *through 21 are modified as follows:*

26 During nighttime construction adjacent to residential neighborhoods, the JPB will
27 require the contractor to direct any artificial lighting onto the worksite and away from
28 any adjacent residential areas at all times.

29 The construction contractor JPB will notify nearby residences of the construction
30 schedule, prior to the start of construction, including the time periods for nighttime
31 construction. A point of contact, including contact information, will be provided to
32 residents to address concerns associated with construction and nighttime lighting.

33 *Mitigation Measure CUL-1c, in Volume I, Chapter 3, Section 3.4, Cultural Resources, Page 3.4-21, Lines*
34 *19-28 are modified as indicate below.*

¹ See <http://www.csmonitor.com/Environment/2014/0123/Why-trains-may-switch-to-natural-gas-instead-of-diesel>;
http://www.eia.gov/forecasts/aeo/section_issues.cfm#liq_nat_gas; and
<http://www.progressiverailroading.com/mechanical/article/Liquefied-natural-gas-could-help-railroads-reap-locomotive-benefits-if-regulatory-technical-issues-are-resolved--39693>

² Ibid.

1 At Tunnels No. 1, 2, and 3, the OCS shall be attached to the interior roof surface of the
 2 tunnel by brackets inserted into shotcrete. In addition, pole sets shall be installed at the
 3 portals of each tunnel. For Tunnel Nos. 1–3, side poles at the portals shall be used with
 4 power systems over the individual tracks that the poles power. The brackets within the
 5 tunnel interiors shall be set inside the tunnel mouth sufficiently far back that they would
 6 not be readily visible to passers-by or to those standing on the passenger platforms.

7 At Tunnel No. 4, the system shall also be attached to the interior roof surface of the
 8 tunnel by brackets inserted into ~~shotcrete~~ the brick lining. In addition, pole sets shall be
 9 installed at the portals of each tunnel. The brackets within the tunnel interiors shall be
 10 set inside the tunnel mouth sufficiently far back that they will not be readily visible to
 11 passers-by or to those standing on the passenger platforms (particularly at Tunnel No.
 12 4's southern portal, the Bayshore Station).

13 *Mitigation Measure CUL-1f, in Volume I, Chapter 3, Section 3.4, Cultural Resources, Page 3.4-33, Lines 4*
 14 *– 7 and Lines 21 – 24 are modified as indicate below. The elimination of the requirement for headspans*
 15 *at these locations would not result in any additional impacts to the historic underpasses because the*
 16 *overhead contact system poles would not be placed on the historic structure itself.*

17 **Airport Boulevard Underpass or South San Francisco Subway**

18 Rather than installing the power system directly onto the bridge, power cables shall be
 19 suspended parallel to and above it to ensure that the bridge will not be impacted. ~~The~~
 20 ~~poles shall support a headspan that crosses the track at the same angle as the~~
 21 ~~roadway beneath.~~

22 **Alameda Underpass, San Jose**

23 Power cables shall be suspended parallel to and above the Alameda Underpass. ~~Pole sets~~
 24 ~~shall support a headspan that crosses the track at the same angle as the roadway~~
 25 ~~beneath.~~ No poles shall be set on the bridge itself.

26 *Mitigation Measure CUL-2a, in Volume I, Chapter 3, Section 3.4, Cultural Resources, Page 3.4-34, Lines*
 27 *37 to 41 are modified as indicated below.*

28 Prior to the start of construction or future construction activities, the JPB and/or the
 29 construction contractor shall retain qualified archaeologists to conduct a pedestrian
 30 archaeological survey to determine the prehistoric, ethnographic, and historic
 31 archaeological resources within areas proposed for disturbance within the
 32 Archaeological Study Area and within those areas outside of the Archaeological Study
 33 Area established for OCS pole placement and vegetation maintenance. In those areas
 34 covered

35 *The table in Volume I, Chapter 3, Section 3.7, Greenhouse Gas Emissions, on Page 3.7-10, was supposed*
 36 *to have been entirely in strikethrough because it has been entirely replaced by Table 3.7-4 on Page 3.7-12.*
 37 *Commenters on the Draft EIR on greenhouse gas emissions were notified of this errata change via*
 38 *email or letter. The strikethrough table should be as follows:*
 39

1 **Table 3.7-3. Estimated Operational Emissions (metric tons CO₂e per year)**

Condition	CO ₂ e
Existing (2013)	
Caltrain Diesel Consumption	45,899
Caltrain Electricity Consumption	785
Total Caltrain System Emissions ^a	46,684
No Project (2020)	
Caltrain Diesel Consumption	45,899
Caltrain Electricity Consumption	531
Total Caltrain System Emissions ^a	46,430
Project (2020)	
Caltrain Diesel Consumption	11,586
Caltrain Electricity Consumption	11,192
Total Caltrain System Emissions ^a	22,778
Change in VMT from Increased Ridership	-44,317
Emissions Due to Loss in Carbon Sequestration Resulting From Tree Removal ^b	260
Total Project Emissions ^c	-21,279
Cumulative No Build (2040)	
Caltrain Diesel Consumption	45,899
Caltrain Electricity Consumption	531
Total Caltrain System Emissions ^a	46,430
Cumulative Project (2040)^d	
Caltrain Diesel Consumption	1,511
Caltrain Electricity Consumption	14,117
Total Caltrain System Emissions ^a	15,628
Change in VMT from Increased Ridership	-146,241
Emissions Due to Loss in Carbon Sequestration Resulting From Tree Removal ^b	260
Total Project Emissions ^b	-130,353
2020 Caltrain System vs. Existing (2013) ^e	-23,906
2040 Caltrain System with Full Electrification vs. Existing (2013) ^{d,e}	-31,056
2020 Project vs. 2020 No Project ^f	-67,709
2040 Project with Full Electrification vs. 2020 No Project ^{d,f}	-176,783
Thresholds	1,100/10,000
^a Includes diesel and electricity emissions; VMT-related reductions due to increased ridership are not included.	
^b Does not include increase in carbon sequestration resulting from tree replanting. Assuming a 1:1 minimum tree replanting ratio (see Section 3.3, <i>Biological Resources</i> , for proposed mitigation), the increase in carbon sequestration would result in lowering project emissions by 3 metric tons in 2020 (assumed 1 year after planting) and 216 metric tons in 2040 (21 years after planting).	
^c Includes the net change in VMT from No Project to Project Conditions associated with increased ridership.	
^d The Proposed Project includes 75% electrified service from San Jose to San Francisco. Fully electrified service from San Jose to San Francisco is presumed by 2040, but is not presently fully funded.	
^e Comparison of Caltrain system emissions only. Changes in VMT emissions and in carbon sequestration not included.	
^f Includes changes in Caltrain system emissions, VMT emissions, and carbon sequestration.	
CO ₂ e	= carbon dioxide equivalent
VMT	= vehicle miles traveled

1 *Mitigation Measure HYD-4, in Volume I, Chapter 3, Section 3.9, Hydrology and Water Quality, Page 3.9-*
 2 *29, Lines 3 through 8 are modified as follows because the analysis above indicated that PS7 Variant A*
 3 *and B are located at an elevation above the elevation of the 100-year flood level:*

4 At PS3 (Option 1), PS6 (Option 1) and TPS2 (Option 3, at CEMOF), ~~as well as PS7~~
 5 ~~(Variant A and B, if selected)~~, the design will minimize the amount of new impervious
 6 areas by using graveled or pervious pavement for all facility areas other than the
 7 foundations for new electric equipment and any other weight-bearing facilities.
 8 Currently unpaved areas not used to house new equipment shall remain unpaved or if
 9 paved shall use pervious pavement. At other paralleling stations, TPS1, and the
 10 switching station, the same measure is recommended, but not required.

11 *The text in Volume I, Chapter 3, Section 3.9, Hydrology and Water Quality, Page 3.9-29, Lines 25 to 27*
 12 *are modified as follows because the analysis above indicated that PS7 Variant A and B are located at an*
 13 *elevation above the elevation of the 100-year flood level:*

14 Since under Project Variant 1, PS7 (Variant A and B) are located in the 100-year
 15 floodplain but at elevations above the 100 year flood level (as noted above), ~~Mitigation~~
 16 ~~Measure HYD-5 would apply if this PS7 location is selected. With mitigation~~, Project
 17 Variant 1 would not have any different impacts relative to the Proposed Project.

18 *Mitigation Measure HYD-5, in Volume I, Chapter 3, Section 3.9, Hydrology and Water Quality, Page 3.9-*
 19 *31, Lines 11 through 17 are modified as follows because the analysis above indicated that PS7 Variant*
 20 *A and B are located at an elevation above the elevation of the 100-year flood level:*

21 For new TPFs within the current 100-year floodplain (PS3 Option 1, TPS-2 Option 3, and
 22 PS6 –both options ~~and PS7 Variant A and B, if selected~~), the preferred method of
 23 avoiding damage would be to place all new electrical equipment on elevated pads above
 24 expected flood depths and/or protect such equipment with flood barriers. If equipment
 25 cannot be designed so that flood waters cannot contact the equipment, then sealed or
 26 capped moisture-resistant components are required. Ground Fault Circuit Interrupters
 27 (GCFIs) shall be utilized for all electrical circuits below the base flood elevation for the
 28 100-year flood.

29 *Mitigation Measure TRA-CUMUL-1, in Volume I, Chapter 4, Section 4.1.4, Cumulative Impact Analysis,*
 30 *Pages 4-125 and 4-126 is modified as follows:*

31 The reference to Table 4-17 on Lines 12, 24, 39, and 40 on Page 4-125 and on Lines 7, 8,
 32 and 27 on Page 4-126 should be to Table 4-18 instead.

33 *Mitigation Measure TRA-CUMUL-3, in Volume I, Chapter 4, Section 4.1.4, Cumulative Impact Analysis,*
 34 *Pages 4-152, Lines 15 to 17 are modified as follows:*

35 Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will
 36 partner to provide Plate H clearance ~~at~~ as the Lafayette Pedestrian Overpass location.

37 *The last page in Volume III, Appendix K, containing the references for Appendix K was inadvertently left*
 38 *out of the CDROMs and off the website initially created for the December 4, 2014 Final EIR release. The*
 39 *web-site has been updated with the correct file and future CDROMS will contain the missing the page.*
 40 *The content of the missing page is listed below.*

41

References for Appendix K	Links
<u>Agility. 2009. Super Express Key Facts.</u>	http://www.agilitytrains.com/assets/pdf/AT-090205-Key_Facts-Released-1_5.pdf
<u>BART. 2014. Solar Photovoltaic Systems Developer RFQ: Questions, Responses, and Clarifications. April 6.</u>	http://www.bart.gov/sites/default/files/docs/Questions%20Responses%20%26%20Clarifications%20-%208-6-14%20final%20w%20attachments.pdf
<u>Caltrain. 2009. Final Environmental Impact Report</u>	http://www.caltrain.com/Assets/Peninsula+Rail+Program/Electrification+2025/Caltrain_Electrification_EA-FEIR_Vol-I_July_2009-WEB.pdf
<u>Caltrain. 2011. Caltrain Future Technology Assessment. Prepared for Palo Alto Rail Committee. Prepared by JPB. May 26.</u>	http://www.slideshare.net/alevin/caltrain-emu-dmu-comparison
<u>Caltrain. No Date. Caltrain webpage "Commuter Fleets"</u>	http://www.caltrain.com/about/statsandreports/commuterfleets.html
<u>Caltrain. 2014. Peninsula Corridor Electrification Project. Cost/Schedule Update. November 6.</u>	http://www.caltrain.com/Assets/_Agendas+and+Minutes/IPB/Board+of+Directors/Presentations/2014/11-6-14+JPB+BOD+CalMod+Cost+and+Schedule+Update.pdf
<u>Caltrans. 2014. Caltrans Announces Siemens \$225 Million Contract to manufacture Cleaner, Diesel-Electric Locomotives in California</u>	http://www.dot.ca.gov/hq/paffairs/news/pressrel/14pr022.htm
<u>LTK. 2012. Caltrain/California HSR Blended Operations Analysis.</u>	http://www.caltrain.com/projectsplans/CaltrainModernization/BlendedSystem/BlendedSystemPlanningProcess.html
<u>LTK. 2014. PCEP FEIR Tier 4 Locomotive Inputs. Prepared for PCJPB. August 6.</u>	-
<u>Massachusetts Executive Office of Transportation 2008. Fairmount Line Service Improvements: Potential Use of DMUs. Prepared by Jacobs. April.</u>	http://www.eot.state.ma.us/downloads/DMU_Fairmount.pdf
<u>Metrolink. 2014. Metrolink Received Critical Funding Commitments for Low-Emission Tier 4 Locomotives. February 10.</u>	http://www.metrolinktrains.com/news/news_item/news_id/899.html
<u>Network Rail. 2014. Network Rail Chooses Suppliers to deliver £2 bn Programme to Electrify Railway Across Britain. Feb. 4.</u>	http://www.networkrailmediacentre.co.uk/News-Releases/Network-Rail-chooses-suppliers-to-deliver-2bn-programme-to-electrify-railway-across-Britain-1fc2.aspx
<u>Nippon Sharyo USA. 2012. Nippon Sharyo and Sumitomo Corporation Receive the Contract Award for 130 Bi-Level Passenger Cars from Caltrans and IDOT. November 6.</u>	http://www.nipponsharyousa.com/tp121106.htm
<u>Plan Philly. 2014. Septa May Purchase Bi-Level Coaches. January 29.</u>	http://planphilly.com/articles/2014/01/29/septa-may-purchase-bi-level-coaches
<u>Railway Gazette. 2012. Amey Awarded Great Western Electrification Contract.</u>	http://www.railwaygazette.com/news/infrastructure/single-view/view/amey-awarded-great-western-electrification-contract.html
<u>Siemens 2014. Multi-State High-Speed Diesel Electric Locomotive. Technical Proposal prepared for Illinois Department of Transportation, Caltrans and WSDOT. Reference #14-1-DPIT.</u>	-
<u>Stadler 2009. GTW DMU 2/6 low-floor for Denton County Transportation Authority DCTA, Texas USA.</u>	http://www.stadlerail.com/media/uploads/factsheets/GDCT0909e.pdf
<u>U.S. Energy Information Agency. 2013 Annual Energy Outlook. Values for transportation fuels.</u>	http://www.eia.gov/forecasts/aeo/pdf/0383(2013).pdf
<u>U.S. Energy Information Agency. 2014. Gasoline and Diesel Fuel Update. On-road diesel price on 09/22/14</u>	http://www.eia.gov/petroleum/gasdiesel/

June 9, 2014

Via Email and U.S. Mail: cockes@samtrans.com

Ms. Stacy Cocke, Senior Planner
Peninsula Joint Powers Board
1250 San Carlos Ave.
San Carlos, CA 94070

Re: ***Supplemental Comments on Behalf of San Jose Arena Management, LLC
Regarding DEIR for Peninsula Corridor Electrification Project***

Dear Ms. Cocke:

Enclosed please find the supplemental comment letter discussed in your email of May 8, 2014.

Sincerely,

SILICON VALLEY LAW GROUP

By: 

Jeffrey S. Lawson

JSL:edn

Encl.: Wenck comment letter

Cc: Jim Benshoof
Jim Goddard



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June 5, 2014

Ms. Stacy Cocke, Senior Planner
Peninsula Joint Powers Board
1250 San Carlos Ave.
P.O. Box 3006
San Carlos, CA 94070-1306

RE: Supplemental Comments on Behalf of San Jose Arena Management, LLC Regarding
DEIR for Peninsula Corridor Electrification Project

Dear Ms. Cocke:

On behalf of San Jose Arena Management LLC, this is to follow-up on two items:

- Letter to you dated April 29, 2014, from Jim Goddard of the SAP Center with comments regarding the DEIR for the Peninsula Corridor Electrification Project.
- Telephone conversation between you and Jeff Lawson of the Silicon Valley Law Group about the above referenced letter from Jim Goddard and our submission of supplemental comments.

As you are aware from Jim Goddard's letter, I have reviewed the DEIR for your electrification project and have been providing consultation to Jim Goddard and the San Jose Arena Management, LLC regarding potential traffic and/or parking implications of the project on the SAP Center. After Jim Goddard's letter was sent on April 29, I realized that we had new and more accurate information regarding parking demand by Caltrain users that reveal greater impacts than the parking analysis results presented in the DEIR.

The DEIR must provide accurate information in order to serve its required purpose. While drafting an EIR necessarily involves some degree of forecasting, an agency must use its best efforts to find out and disclose all that it reasonably can. Because I have been closely involved in evaluating all the traffic and parking plans surrounding the SAP Center for the last 24 years, I have access to detailed forecasts and land use plans and congestion management plans, for which others may not have such familiarity. Thus, I am in a position to assist Caltrain by identifying the most accurate information available.

If parking demand at the Diridon Station exceeds projections and exceeds the parking supply for transit users, the extra transit users will park in spaces that are part of the off-site parking inventory the City is committed to provide for SAP Center customers. This potential loss of available spaces for SAP Center customers is a significant impact on the SAP Center and our customers. I am sure Caltrain seeks to avoid such impacts.

As you know, the Diridon Station area will experience extensive growth in the future, including:

- Substantial new development
- Extension of BART service to Santa Clara, with a Diridon station
- Blended Caltrain/High Speed Rail service

Accurate and consistent data must be utilized in order for the cumulative effects of the above projects and the Caltrain Electrification Project to be successfully accommodated without causing significant negative impacts. For example, if Caltrain parking demand exceeds the supply of spaces for Caltrain customers, negative impacts would occur for all other users in the Diridon area.

As part of Arena Management's ongoing work pertaining to the Diridon Station Area Planning Study, Arena Management staff conducted a survey in October and November 2012 to record parking occupancy by Caltrain users. Using data recorded on three typical weekdays, this survey found that the total parking demand by Caltrain users was 868 spaces, full usage of Cahill Lots 1, 2, 3, and 4 (581 spaces) plus full usage of the Stevens Meat lot (130 spaces) plus 157 vehicles parked nearby in on-street spaces. Though more recent survey data are not available, Arena Management staff have observed that Caltrain parking demand is continuing to grow, including parking by Caltrain customers in SAP Center parking lots. This existing, surveyed parking demand at the Diridon Station of 868 vehicles is substantially higher than the estimated parking demand referenced on page 2 in Appendix D of the DEIR (576 spaces with a 99% utilization, which yields a parking demand for 570 spaces).

In addition to parking projections at the Diridon Station presented in your DEIR, transit parking projections at this station also have been presented in Appendix C.2 of the following document: "Diridon Station Area Plan, Preferred Plan, Final Draft Report," City of San Jose, December 2013. Appendix C.2 is entitled, "Diridon Station Area Plan 10-Year Horizon Report." As presented on attached page 3-3 from that appendix, the projected parking demand for the Diridon Station at the end of the 10 year planning period (about 2024) is 1,240 vehicles. This parking demand projection of 1,240 vehicles in about year 2024 is substantially higher than the two projections presented in Appendix D of your Caltrain DEIR. Table 3-34 in that appendix cites a parking demand of 1,002 vehicles in 2020, and Table 3-35 cites a parking demand of 380 vehicles in 2040. The parking demand of 868 vehicles surveyed in October and November 2012, together with the ridership growth projected by Caltrain, clearly indicate that the transit parking demand of 1,240 vehicles presented in the Diridon Station Area Plan is more valid than the demand values of 1,002 and 380 presented in the Caltrain DEIR.

As you respond to comments regarding the DEIR for the Caltrain Electrification Project, please account for the two items of information presented in this letter regarding transit parking demand at the Diridon Station:

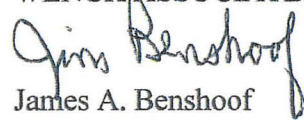
- Parking demand of 868 vehicles surveyed in October and November 2012, with continued growth since that time
- Ten year parking demand projection in Diridon Station Area Plan of 1,240 vehicles

As previously mentioned, we believe that the Caltrain Electrification Project should use the best data available to avoid unanticipated adverse impacts on SAP Center customers due to increased parking by transit users in off-site spaces.

Thank you for considering this supplemental information and request. If you have any questions, you are welcome to contact me by email: jabenshoof@msn.com or by phone: 612-799-5918.

Sincerely,

WENCK ASSOCIATES, INC.



James A. Benshoof

Enc. Page 3-3 from Appendix C.2. of Diridon Station Area Plan

C w/ enclosure: Jim Goddard, SAP Center and Jeff Lawson, Silicon Valley Law Group

DIRIDON STATION AREA PLAN

10-YEAR HORIZON ANALYSIS
DRAFT REPORT - APRIL 2014

Prepared by
Field Paoli
CDM Smith
Dyett & Bhatia
Fehr & Peers
David J. Powers & Associates
Hexagon

for
The City of San José

*Revisions Prepared by the
City of San José
Department of Transportation*

3.3 Shared Parking Demand

The shared or combined parking demand for the TYHA has been projected based upon current and future transit service at the Diridon Station, and the maximum build out of the Central Zone of the DSAP Preferred Plan. The Central Zone core block land uses would include high-density office, retail, and hotel uses in the immediate vicinity of the Diridon Station. The two major components of parking demand, transit and development, are analyzed below:

Transit Parking Demand

For transit based parking demand, the existing surface parking lots in front and in the immediate vicinity of the Diridon Station from Santa Clara Street to Park Ave meet the existing transit generated parking demand (refer to the Diridon Station Area Plan Existing Conditions Report, *Table 7-5: Non-Event Off-Street Parking Demand* (Subareas G and H) which shows that these lots are typically at a maximum 88% occupied at peak times on non-event days). The following surface lots and street parking spaces represent the supply of adjacent parking to meet transit based parking demand:

Off-street Spaces

Caltrain Lots:	581 spaces
Stevens Meat Lot:	135 spaces
150 South Montgomery:	68 spaces
Carousel Lot:	228 spaces
Amtrak Lot:	78 spaces
Subtotal:	1,090 off-street spaces

On-street Spaces

Subarea G:	82 spaces
Subarea H:	68 spaces
Subtotal:	150 on-street spaces

Available Transit Parking: 1,240 spaces

Given the adjacent parking supply has consistently met the transit parking demand of the Diridon Station, and that these parking spaces will be developed upon, the TYHA assumed that 1,240 spaces represent the transit parking demand, and would need to be fully replaced in the TYHA build out scenario, within a reasonable walking distance of the Station. For purposes of the TYHA scenario, the transit parking demand is estimated at 1,240 spaces.

Development Parking Demand

The development related parking demand estimates in TYHA were based upon industry parking generation manuals and the applied experience of the parking and transportation consultants performing and validating the analysis. The shared parking methodology outlined in the Urban Land Institute's, "*Shared Parking, Second Edition*" formed the basis of shared parking model central to efficiently meeting the parking needs of the Diridon Station Area Plan. As described in the ULI guidelines, "the shared parking methodology



Making San Francisco Bay Better

JUL 01 '14 AM 9:57 EXEC

June 30, 2014

Mr. Tom Nolan, Chair
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
PO Box 3006
San Carlos, CA 94070

SUBJECT: Peninsula Corridor Electrification Project, Draft Environmental Impact Report
BCDC Inquiry File SM.SM.7115.1

Dear Mr. Nolan:

Please accept for the consideration of the Peninsula Corridor Joint Powers Board (Board) the following San Francisco Bay Conservation and Development Commission (Commission or BCDC) staff comments on the proposed Peninsula Corridor Electrification Project. I understand that the comment period on the Draft Environmental Impact Report (DEIR) closed at the end of April. We received the DEIR in February, however, it was not brought to my attention until last week, and I hope that our tardy comments can still be factored into the revisions to the document.

The staff applauds the efforts of the Joint Powers Board to accommodate the ever increasing demand for transit service along the Peninsula and hopefully reduce the vehicular miles travelled in this growing area of the region. I am a daily Caltrain passenger, and appreciate the service immensely, and look forward to faster, more frequent service. We do, however, wish to highlight where we have questions concerning future shared use of the rail tracks for freight transport between the Central and South Bays, based on our review of the DEIR, and the Commission's law and policies.

The Commission exercises permitting authority over San Francisco Bay and the shoreline area between the Bay's edge and a line 100 feet landward and parallel to the shoreline. The *San Francisco Bay Plan* (Bay Plan) contains, in part, policies related to the use and protection of the Bay. Under the Federal Coastal Zone Management Act (CZMA), BCDC analyzes proposed federal actions or projects involving a federal permit, license or federal funding for potential effects to the coastal zone. Within its jurisdiction, which is coterminous with the coastal zone, the Commission designates certain shoreline areas for uses that require a waterfront location, such as ports and water-related industry, to avoid potential filling of the Bay in order to accommodate such uses. If federal funding, or a federal permit is associated with this project, the Commission has the authority to review the lead agencies determination whether the activity is consistent with the Commission's law and policies.

The *San Francisco Bay Area Seaport Plan* (Seaport Plan) contains policies concerned with future port development. The Commission's Bay Plan policies aim to ensure that sufficient land and appropriate infrastructure be retained and improved to support ongoing and future port operations. This would include maintaining adequate cargo transport facilities to and from the two seaports located on the Peninsula, Redwood City and San Francisco. Seaport Plan Ground Transportation policy 3 states, "Local and regional transportation planning and funding priorities should facilitate the efficient movement of goods by rail and truck to and from the Bay Area ports." As stated in the project DEIR, the level of freight service could be negatively affected by restricting the number of daily freight trains due to shortened overnight operating hours as well as by restricted tunnel clearances due to the addition of the overhead electrification equipment.

Where shared rail lines would be affected by the proposed Caltrain improvements, we request that the Board consider the needs of the industries sharing the tracks. Continued steady growth is anticipated in the types of products handled by the Peninsula ports.¹ As an example, the Port of Redwood City recently rebuilt and enlarged its Wharves 1-2 terminal, greatly expanding its capacity for bulk cement and general cargo. Construction material facilities such as concrete production need to be located in the vicinity where the material will be used as is currently the case in Redwood City, the Peninsula and Silicon Valley. The Port of San Francisco has similar construction-material related port facilities. These are critical to the overall functioning of the Bay Area construction industry, and our economy. The suggestion that future growth in transport of these types of products could be accommodated, at least in part, by diverting freight to alternative ports (DEIR p. 4-128), does not reflect the operational requirements of construction-related industry currently, or in the future.

Another potential project impact on freight service would be reduced clearance in tunnels and other locations along the route with the installation of electrification infrastructure. According to the DEIR, modifications would be made to accommodate *current* freight service needs. However, future service could be adversely affected by precluding industry modifications that include increasing car size, designed to improve shipping efficiencies and lower fuel use. We believe some infrastructure or operational mitigation should be considered in anticipation of changes in freight transport.

The Bay Plan also contains policies designed to mitigate the regional effects of climate change and sea level rise. The proposed electrification would provide a number of benefits to the region, including a direct reduction in adverse air quality impacts from Caltrain operations, and green house gas (GHG) emissions reductions. Concurrently, automobile congestion and associated adverse air quality impacts and GHG production would decline on area roadways with increased rail passenger capacity. According to the DEIR, these gains will offset any added truck traffic that may result from reduced rail freight service. It is our understanding that, as with ship cargo transport, rail freight volumes rise and fall during the course of a year. Demand for track use is thus not consistent, and should be considered in calculating the potential volume of freight that may be diverted to truck and resulting additions to air quality impacts and greenhouse gases. Additionally, with curtailed or altered rail operations comes a likely need for expanded storage. The DEIR should consider future car storage needs of freight users of the shared tracks.

We believe that Caltrain electrification helps achieve important regional objectives for reducing GHG emissions and increasing the capacity and convenience of regional transit. Over 40 years ago, the region established priorities for its ports as articulated in the Bay Plan, and more specifically in the Seaport Plan. We believe that the issues raised here can and should be addressed so that we do not achieve one green house gas reduction goal, only to push trucks on to Bay Area roads thereby offsetting those gains. We stand ready to work with you to address our comments and achieve a win-win.

Thank you for considering the staff's comments. I would be pleased to discuss these issues at your convenience. Or should you have any questions, please contact me at 415.352-3656, or via email, at joel@bcdcc.ca.gov.

Sincerely,



JOE LaCLAIR
Chief Planning Officer

cc: John Coleman, Bay Planning Coalition
Peter Dailey, Port of San Francisco
Mike Giari, Port of Redwood City

¹ Including construction materials for the South Bay, such as cement, imported sand and aggregates. Regional volumes of dry bulk cargoes such as these are projected to increase at a rate of 4% annually through 2030, based on a 2011 review of the Seaport Plan bulk cargo forecast conducted by Tioga Group, Inc.

Additional Errata to the Final EIR

Introduction

This document provides several additional errata to the Final EIR. None of these errata result in the identification of any new significant impacts or any substantially more severe significant impacts and thus their addition to the EIR does not trigger any requirements for recirculation.

Errata Changes to the Final EIR

The following changes are made to the Final EIR document released on December 4, 2014. Changes are noted in ~~strikeout~~ for deleted text and underline for added text:

Vol. I Revised Draft EIR, Page 3.9-24, Lines 16 to 25 are modified as follows:

In areas where subsurface structures exist adjacent to or underneath the Caltrain ROW (i.e., BART alignment from San Bruno and Burlingame), groundwater intrusion effects during foundation drilling will be temporary and minimal because: 1) dewatering will be conducted where groundwater is encountered thus removing the potential for substantial intrusion in the open hole; 2) the foundation would be sealed once the pole is installed, thus removing the potential for intrusion following construction; and 3) the areas where excavation would occur are very small (diameter of 3 feet for OCS poles) and thus any effect such as increased hydraulic pressure, on groundwater aquifers would be minimal; ~~and 4) it is likely that BART tunnel foundations are sealed against groundwater penetration to prevent from deterioration of the tunnel structure and components.~~

Vol. I Revised Draft EIR, Page 3.4-16, Table 3.4-2, is modified as follows regarding the Santa Clara Tower at Benton and Railroad Street:

44.60	Santa Clara Tower at Benton and Railroad Street (2) <u>4</u>	Station	Santa Clara	Santa Clara	1927
-------	-------------------------------------------------------------------------	---------	-------------	-------------	------

~~4 The tower is outside of the boundary of the NRHP listed Santa Clara Station; it is locally recognized as a historic resource and therefore considered a historic property for the purposes of CEQA.~~

Vol. II, Response to Comments, Response to comment R3-18, Page 3-85, Lines 4 to 11 is modified as follows:

The Proposed Project would not involve contact or use of groundwater for Project operation and maintenance, and therefore groundwater impacts would be less than significant. Groundwater dewatering is not expected to occur during Project operation construction. ~~It is likely that BART tunnel foundations are sealed against groundwater penetration to prevent from deterioration of the tunnel structure and components.~~ In addition, the underground portions of the OCS poles and utilities would cover a small area (overall and locally) relative to other underground structures, and the foundation would be sealed once the pole is installed, thus removing the potential for intrusion following construction; and thus the OCS poles and utilities are not expected to cause groundwater intrusion into BART facilities from shallow groundwater aquifers. This change is shown in Section 3.9, Hydrology and Water Quality, in Volume I of this Final EIR.

Responses to Certain Comments on the Final EIR and Additional Errata to the Final EIR

Introduction

This document provides responses to certain issues raised in certain comments on the Final EIR and several additional errata revisions to the Final EIR. None of these errata result in the identification of any new significant impacts or any substantially more severe significant impacts and thus their addition to the EIR does not trigger any requirements for recirculation.

Additional Responses to Certain Issues Raised in Certain Comments on the Final EIR

While CEQA requires consideration of the substantive issues raised in any written comments submitted during the CEQA review process, CEQA only requires the preparation of written responses to substantive issues raised in written comment submitted during the specified review period for the Draft EIR which was from February 28, 2014 to April 29, 2014.

Despite being under no obligation to respond in writing, the JPB has opted to respond to certain specific issues raised in certain comments on the Final EIR: (1) Union Pacific (01/7/15); Roland Lebrun (01/06/15); and (3) from the Silicon Valley Law Group on behalf of San Jose Arena Management, LLC (01/7/15). These comments were included in the JPB Board Packet for 01/08/15 and are part of the administrative record.

Response to certain issues raised in the January 7, 2015 comment submitted by Union Pacific

This comment raised certain issues concerning CPUC general orders and EMF/EMI concerns. The comments on CPUC matters are not CEQA concerns. While the EMF/EMI comments primarily raise issues adequately addressed previously in the FEIR, several additional responses are provided below:

- Shared Tracks and EMF/EMI: The comment asserts that the JPB has not identified any locations where EMI issues have been successfully handled for shared tracks between electrified trains with overhead OCS and freight. This is incorrect. Vol. II, Chapter 3, Master Response 11 (Freight), Page 3-55, Lines 24 to 32 describes *“Diesel locomotives run compatibly side-by-side and on shared tracks with electric trains on the NEC and its connected commuter railroads in areas of dense, critical rail service, at speeds up to 150 mph. The NEC electric trains have power systems that are similar to those planned for the PCEP. The NEC electric train traction voltage and electrical current levels are similar to those planned for PCEP. The NEC electrified and non-electrified tracks have similar signal systems to those broadly and routinely used on electric rail transit lines across the U.S. The electrified and non-electrified commuter railroads connected to the NEC have grade crossing systems that are similar to those used on sections of the Union Pacific lines and to those broadly and routinely used on light rail and commuter rail lines across the U.S.”* As further evidence, additional information has been added to Master Response 11 (freight describing that the there are many portions of the NEC where freight and electrified trains share

1 tracks such as the Providential-Worcester Line. According to the Northeast Corridor Master
2 Infrastructure Plan¹, on a typical day, seven freight railroads operate up to 50 trains over
3 Amtrak-owned portions of the NEC. The only portions of the entire NEC network without active
4 freight service are between Queens, NY and Newark, NJ and between Landover, MD and
5 Washington DC. The Acela operates between Washington, DC, New York, and Boston, which
6 means that electrified passenger rail and freight are sharing the NEC for the vast majority of the
7 electrified service area. Figures 1 and 2 below show shared right of way operations of the
8 electrified Acela service with non-electrified Providence & Worcester freight rail and specifically
9 show diesel freight trains operating “under the wires” of electrified OCS for electrified passenger
10 trains. The FEIR has been revised to add this definitive evidence of shared electrified passenger
11 rail and freight system operation on the NEC. Any signal systems in such segments are in shared
12 use by both electrified passenger trains and non-electrified freight trains. The Acela and freight
13 have been operating successfully and safely for many years on the NEC. There are also shared
14 rail systems in Europe and Russia and in Chile where diesels are running “under the wire”. Thus,
15 contrary to the comment from Union Pacific, the condition of shared freight and passenger
16 tracks is not unique and handling EMI effects for shared tracks is well understood. This is
17 evidence that addressing EMI concerns on Caltrain corridor system is feasible based on real
18 world examples and that Mitigation Measure EMF-2 can feasibly address potential signal
19 concerns raised by Union Pacific. It should also be noted that since Caltrain and freight share
20 tracks, the signal system used by freight is the same system used by passenger trains. Caltrain
21 shares the same interest in the safe operations of train signal systems and advanced warning
22 devices as Union Pacific and Mitigation Measure EMF-2 requires Caltrain to work with Union
23 Pacific (and other parties) to ensure that signals and advanced warning devices operate
24 correctly with the project. Thus, this comment does not raise any inadequacy in the EIR analysis
25 of EMF/EMI issues and apart from adding the evidence of existing operating shared track
26 systems, there is no further need for revision of the EIR in this regard to this comment.
27

¹ NEC Master Plan Working Group. 2010. Northeast Corridor Master Infrastructure Plan. Working Group includes representatives of 12 states, the District of Columbia, Amtrak, FRA, 8 commuter and 3 freight railroads operating on the NEC. May. Available: <http://www.amtrak.com/ccurl/870/270/Northeast-Corridor-Infrastructure-Master-Plan.pdf>.



Low speed freight trains and high-speed passenger trains operating at up to 150 mph share the NEC right-of-way as illustrated here by Amtrak Acela Express operating with Providence & Worcester.

1
2
3

Figure 1: Photograph of Shared Acela and Freight Operations on the Northeast Corridor
(Source: NEC Master Plan Working Group. 2010)



RRPictureArchives.NET Image Contributed by John Wallace

- 1 ● **Figure 2: Photograph of Providence and Worcester freight railroad operating on shared**
- 2 **tracks with electrified 25 kV overhead contact system overhead on the Northeast**
- 3 **Corridor.**

- 4 ● Power System Impacts on Signal Systems: The comment asserts that there are (and have been
- 5 in the past) several locations in North America where electrical power systems have caused EMI
- 6 that has affected railroad signaling systems and other effects. Although the comment does not
- 7 actually describe the location and circumstance of these alleged problem locations, taking Union
- 8 Pacific at their word, the prior Master Response 11 (Freight), has been revised to delete
- 9 reference to electrical transmission systems not resulting in any EMI impacts to railroads. This
- 10 deleted text on electrical transmission systems is not material to the FEIR conclusions which
- 11 concern EMI impacts from electrified rail OCS for the PCEP. The EIR identifies and acknowledges
- 12 a potential project EMI impact to signal systems, describes the NEC example of successful shared
- 13 electrified passenger and freight operations, and requires mitigation (Mitigation Measure EMF-
- 14 2) which requires evaluation, testing, implementation and monitoring of EMI and/or
- 15 replacement of signal systems and advanced warning devices in order to safely operate
- 16 electrified passenger and freight rail service along the Caltrain Corridor.

- 1 • AFO-based circuits: The comment asserts that there would be safety impacts due to
2 replacement of current warning devices at grade crossings with AFO-based circuits. As the
3 comment describes, AFO-based circuits would trigger the advanced warning devices when a
4 train crosses within a certain distance of the crossing. This would mean that the advanced
5 warning time for a freight train will be more than for a passenger train operating at full speed.
6 Freight trains on the corridor generally operate at slower speeds than passenger trains. The
7 comment asserts that motorists might be tempted to drive around the gates because of a
8 perception that the longer wait time is due to a false activation. The comment provides no
9 evidence that this would actually occur and thus is speculative. The Caltrain corridor currently
10 has and will have FRA-approved advanced warning systems, signals, and barriers at grade
11 crossings. It is the responsibility and legal obligation of motorists to obey such systems, signals
12 and barriers which are there for their safety. As such, while motorists may have to wait longer a
13 few times per day on the peninsula (there are only 2 round-trip trains per day on any one
14 segment between Santa Clara and San Francisco and freight operates outside of peak traffic
15 times), which would be a minor inconvenience, there is no evidence provided in this comment
16 that this would actually create a significant impact on safety. Thus, there is no need for further
17 revisions to the FEIR concerning the comment on AFO-based circuits.

18 **Response to one issue raised in the January 6, 2015 comment submitted by** 19 **Roland Lebrun**

20 This comment raised certain issues concerning consistency with Prop 1A, dual-mode multiple unit
21 trains (aka “hybrid” trains as described in the comment), factory trains for construction, and the
22 potential use of extended “neutral” or non-electrified sections as part of mitigation for cumulative
23 impacts to freight heights. Issues concerning Prop 1A, dual-mode multiple unit alternatives and a
24 factory train alternative are adequately addressed previously in the FEIR. Additional response is
25 provided below to the comment about extended neutral sections:

- 26 • The comment claims that scoping comments on the Draft EIR described the use of neutral
27 sections as mitigation for impacts to restricted overhead clearances at bridges and overpasses.
28 This is incorrect. Mr. Lebrun’s scoping letter comment suggests the use of neutral sections to
29 address potential impacts to overhead utilities, not to restricted overhead clearances at bridges
30 and overpasses. Overhead utilities can be relocated underground or above the OCS as described
31 in the EIR without the use of neutral sections. The scoping comment from Mr. Lebrun does not
32 mention the potential use of neutral sections to manage freight overhead clearance impacts and
33 Mr. Lebrun’s comment letter on the Draft EIR does not mention neutral sections at all.
- 34 • Network Rail (UK) has used neutral sections for the Paisley Canal project as a cost saving
35 measure for areas of restricted overhead clearance and there are several other examples of
36 neutral section gaps in the tens of meters length. However, Network Rail does not recommend
37 use of extended neutral sections for its core network and only recommends their use “when
38 there is a low risk that a train might come to a standstill and cause a problem to service
39 performance, where line speeds are low, and service frequency is low.”² This is not necessarily

² Network Rail. 2013. Network RUS: Alternative Solutions. July. Available:
<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/network/working%20group%205%20-%20alternative%20solutions/network%20rus%20alternative%20solutions.pdf>.

1 analogous to the Caltrain corridor where speeds are not low and service frequency is relatively
2 high. The most constrained location for overhead clearance in the mid-Peninsula area is the San
3 Francisquito Creek Bridge between the Palo Alto and Menlo Park stations. This low point
4 defines the restriction on height from the Butterhouse Spur to Bayshore. The bridge is at a
5 location where trains can and do operate at speeds up to 79 mph so the appropriateness of a
6 neutral section solution at this location is unknown without further technical evaluation.

- 7 ● Furthermore, Mr. Lebrun is raising this comment one day before the certification hearing
8 whereas he had ample opportunity to raise this issue in comment on the Draft EIR or further in
9 advance before the certification hearing and thus it is unreasonable to expect the JPB to
10 complete a technical evaluation of an entirely new technical mitigation option at the 11th hour.
- 11 ● Nevertheless, as there is evidence in the UK of the use of “neutral sections” under the right
12 circumstances, which may or may not apply to the Caltrain Corridor given speed and frequency
13 concerns noted above, Mitigation Measure TRA-CUMUL-3 has been revised to require the JPB to
14 conduct a feasibility analysis of the potential use of a “neutral section” at the San Francisquito
15 Bridge to potentially avoid/minimize restrictions to freight overhead clearance below Plate H
16 between San Jose and Bayshore. ³ If the use of a “neutral section” is feasible at the San
17 Francisquito Bridge without compromising project service improvement objectives or safety,
18 then the mitigation will require that some combination of track lowering and “neutral sections”
19 (if feasible) be used to provide Plate H clearance between San Jose and Bayshore.

20 **Response to San Jose Arena Management, LLC January 6, 2015 comment** 21 **submitted on Behalf of Sharks Sports & Entertainment**

22 The comment submitted on behalf of SSE dated January 6, 2015 asserts that the parking analysis in
23 the Final EIR underestimates existing parking capacity and future with project impacts on parking.

- 24 ● Existing Demand: In a separate errata responding to a June 9, 2014 comment submitted
25 concerning the SAP Center, responses have been provided that document how the existing
26 parking capacity was estimated. Nothing in this comment warrants revision to the prior
27 analysis
- 28 ● Future with Project Impacts: In a separate errata responding to a June 9, 2014 comment
29 submitted concerning the SAP Center, responses have been provided that document how future
30 parking demands were estimated. Nothing in this comment warrants revision to the prior
31 analysis.
- 32 ● Parking “Mitigation” Responsibility Assignment: The comment asserts that the EIR assigns
33 parking mitigation responsibility to the City of San Jose. The EIR does no such thing. The EIR
34 does not identify a significant parking impact of the PCEP; therefore no mitigation is proposed.
35 The FEIR describes the Diridon Station Area Plan and the approach the City of San Jose is using
36 concerning parking. This is not “mitigation” for the PCEP’s impact on parking. Furthermore, the
37 comment letter asserts that the JPB should provide mitigation for the loss of parking at the
38 Caltrain Diridon parking lot due to proposed development in the Diridon Station Area Plan. The
39 PCEP does not include any development in the Caltrain Diridon parking lot, and thus no

³ North of Bayshore, overhead clearance is restricted by tunnels which are too long for consideration of a “neutral section”.

1 mitigation is warranted related to any such future development as part of the PCEP EIR. The
2 City of San Jose is the lead agency for the DSAP and as such is responsible for any DSAP required
3 actions or mitigations, as determined necessary in the CEQA process for the DSAP.

- 4 • As described in the PCEP EIR, a parking deficit in and of itself is not considered a significant
5 impact on the environment. Furthermore, the EIR also presents evidence that a likely response
6 to Caltrain parking deficits would be shifts in customer behavior, primarily through use of other
7 means to access areas (carpools, transit, bike, walk, etc.) particularly given the planning for
8 other modes of access to the Diridon Station in the future. Even if some Caltrain riders are
9 deterred from using Caltrain due to a parking deficit, as described in the EIR, most of the
10 projected ridership is still expected to occur. The PCEP EIR also describes the evidence for a
11 shift in the mode of access to Diridon for future Caltrain users (see FEIR, Vol. III, Appendix D)
12 compared to existing conditions. Modeling of the mode of access was conducted by an expert
13 traffic engineering consulting firm, Fehr & Peers. While the comment letter may disagree with
14 Fehr & Peers analysis of parking demand, there is evidence on the record supporting the
15 conclusions presented in the EIR and no further revisions are necessary to the FEIR in response
16 to this comment.
- 17 • The comment also includes a table that purports to show a “6pm” event parking demand for the
18 SAP Center. The table is confusing and not directly applicable to Caltrain. It present numbers
19 for transit demand at 6pm and states that there would be a deficit of 933 spaces if a new 900
20 space garage for SAP center is not build (which the DSAP calls for) and the Adobe lot is not
21 available. However, even if the transit demand numbers are realistic (given the lateness of the
22 comment there was insufficient time to conduct an independent analysis of the table), the table
23 doesn’t mention on-street parking, which would likely be more than enough to accommodate
24 any shortfall that might occur on event days even if patrons might need to walk some distance to
25 the SAP Center as a result. Off-site street parking for events is a common practice at many event
26 centers.
- 27 • No further revisions to the EIR are necessary pursuant to this comment.

28 **Errata Changes/Addition to the Final EIR**

29 The following changes are made to the Final EIR document released on December 4, 2014. Changes
30 to the December 4, 2014 FEIR text are noted in ~~strikeout~~ for deleted text and underline for added
31 text:

32 *Vol. 1, Executive Summary, Table ES-2, Page ES-47 is modified as follows:*

33 TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide
34 Plate H clearance ~~as the Lafayette Pedestrian Overpass location~~, as feasible between San
35 Jose and Bayshore

36 *Vol. 1, Section 4.1, Cumulative Impacts, Page 4-151, following Line 223 to 44 to Page 4-153, Line 13 is*
37 *modified as follows:*

38 An alternative approach to the San Francisquito Bridge vertical clearance would be to
39 provide a short “neutral section” in which the OCS would have a non-electrified segment
40 through the bridge. This approach has been used for several short areas of electrified
41 railroads in the UK in areas of constrained overhead clearance, but has only been
42 recommended for low speed, low frequency branch lines (Network Rail 2013, Network

1 RUS Alternative Solutions). Mitigation Measure TRA-CUMUL-3 requires assessment of
2 the feasibility of a neutral section for the San Francisquito Bridge location. If a neutral
3 section is feasible while supporting project service objectives and safety, then Mitigation
4 Measure TRA-CUMUL-3 would require the use of neutral section at the San Francisquito
5 Bridge location as necessary to accommodate actual freight use of Plate H equipment
6 north of Santa Clara (as noted previously, at present freight operators are not using
7 Plate H equipment north of San Jose).

8 However, if a neutral section is not feasible at San Francisquito Bridge. As a result,
9 freight heights from Bayshore (MP 5.5) to the Butterhouse Spur (MP 41.4) would be
10 limited to 18.92' (Plate F+) which is the height of current equipment, but is less than the
11 existing effective clearance on this segment of approximately 20.25' (Plate H). There are
12 no freight spurs from the San Francisquito Bridge (MP 29.7) to the Butterhouse Spur
13 (MP 41.4), so Mitigation Measure TRA-CUMUL-3 would only includes improvements
14 south of the Butterhouse Spur if a neutral section is not feasible at the San Francisquito
15 Bridge.

16 Thus, with Mitigation Measure TRA-CUMUL-3, vertical clearances from the south end of
17 the project (MP 52.0) to the Butterhouse Spur (MP 41.4) would allow Plate H equipment
18 similar to today's existing effective conditions. If Plate H clearance cannot be provided at
19 the San Francisquito Bridge through use of a neutral section, from the Butterhouse Spur
20 to Bayshore, Plate F+ (18.92') equipment could be used the same as under today's
21 operations, but Plate H equipment could not be used. North of Bayshore, the project's
22 proposed tunnel improvements would provide the same effective vertical clearance as
23 present, and no additional tunnel improvements are included as mitigation.

24 If Plate H clearance cannot be provided at the San Francisquito Creek Bridge through
25 use of a neutral section, Mitigation Measure TRA-CUMUL-3 would be limited to track
26 lowering at the Lafayette Pedestrian Overpass (MP 43.65) to provide Plate H clearance
27 to allow Plate H clearance to be able to access the Butterhouse Spur.

28 The residual cumulative impact would be a future constraint on train equipment to
29 existing freight heights from the Butterhouse Spur to Bayshore to Plate F+ (18.92')
30 instead of the current possible Plate H (20.25') clearance. While it is not likely that
31 freight will be diverted to truck modes due to this change, given that existing Plate H
32 equipment is not used on this portion of the corridor, it is possible there might be a
33 mode shift for some of the future freight growth. As discussed above, this would not be a
34 significant regional traffic, air quality or GHG emissions cumulative impact, but might
35 result in some localized noise or traffic impacts, depending on location of truck haul
36 routes, timing, and intensity. This is considered a significant and unavoidable impact,
37 primarily due to the concerns described above concerning the San Francisquito Bridge,

38 However, if Plate H clearance can be provided at the San Francisquito Bridge through
39 use of a neutral section, then Mitigation Measure TRA-CUMUL-3 would require track
40 lowering and/or neutral sections (if feasible) at additional locations to allow Plate H
41 equipment operation from San Jose to Bayshore. In this scenario, Plate H clearance
42 would be provided from San Jose to Bayshore, similar to that available today (but not
43 utilized) and there would not be a potential for shift of freight from rail to truck modes
44 and this impact would be mitigated to a less than significant level.

1 **Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will**
 2 **partner to provide Plate H clearance as feasible between San Jose and Bayshore the**
 3 **Lafayette Pedestrian Overpass location**

4 Caltrain and freight operators share responsibility for the potential constraints that may occur
 5 due to the combination of a change in freight operating equipment and the installation of the
 6 OCS.

7 **Bayshore to Butterhouse Spur (MP 41.4)**

8 If freight operators identify a plan to operate freight railcars along the Caltrain corridor between
 9 Bayshore and the Butterhouse Spur (MP 41.4) that would be hindered by the OCS installation
 10 compared with existing conditions, then Caltrain and freight operators shall evaluate the
 11 feasibility to provide Plate H effective vertical height clearances where needed along this
 12 segment of the Caltrain corridor.

13 The evaluation shall first include a feasibility assessment of a “neutral section”, or unelectrified
 14 segment, for the San Francisquito Bridge. If the use of a “neutral section” is feasible without
 15 compromising project service improvement objectives or safety, then a combination of track
 16 lowering and “neutral sections” (if feasible) shall be used to provide Plate H clearance between
 17 Bayshore and the Butterhouse Spur (MP 41.4).

18 Based on current analysis (see Table 4-23) apart from San Francisquito Bridge, additional
 19 vertical clearance height would be required at the following locations to support Plate H
 20 equipment: Oyster Point Parkway (MP 8.60, +0.1’), Signal Bridge (MP 9.10, +0.7’), San Antonio
 21 Avenue (MP 34.0, +0.63’), Highway 85 (MP 36.5, +0.15’), Pedestrian Overpass (MP 39.40, +0.44’)
 22 and Lawrence Expressway (MP 40.75, +.16’).

23 If a “neutral section” is not feasible at the San Francisquito Bridge and thus the entire segment
 24 would be constrained by the low point at the San Francisquito Bridge, then no further
 25 improvements are required between Bayshore and the Butterhouse Spur.

26 **Butterhouse Spur (MP 41.4) to MP 52.0**

27 If freight operators identify a plan to operate freight railcars along the Caltrain corridor between
 28 MP 52.0 and the Butterhouse Spur (MP 41.4) that would be hindered by the OCS installation
 29 compared with existing conditions, then Caltrain and freight operators shall implement site
 30 improvements to restore effective vertical height clearances where needed along the Caltrain
 31 corridor.

32 Based on current analysis, the only proposed improvement in addition to the Proposed Project
 33 tunnel notching/track lowering at the four San Francisco tunnels and the track lowering at
 34 Hedding Avenue (MP 46.15), San Carlos Avenue (MP 47.89), Curtner Avenue (MP 50.59), a
 35 private overpass (MP 51.08), would be track lowering at the Lafayette Pedestrian Overpass (MP
 36 43.65).

37 **Both Segments**

38 Track lowering is a possible solution to rectify the reduction in clearance at constrained bridge
 39 overcrossings, but further study will be required to determine the condition of track subgrade in
 40 each specific area and to locate existing utilities that may impact the track lowering. If it is

1 determined existing utilities are in the way of potential track lowering, the existing utilities will
2 have to be relocated in order to achieve the desired clearance.

3 Caltrain and the freight operators shall apportion any cost pursuant to the existing agreement
4 between the parties.

5 Presuming that any identified improvements will be implemented by an entity that is subject to
6 CEQA, those improvements would need to be analyzed for their environmental impacts, as
7 warranted, to determine if any additional significant impacts beyond those disclosed in this EIR
8 for clearance improvements (e.g., those described in Chapter 2, *Project Description*).

9 Environmental clearance shall be obtained, if necessary and required, prior to construction of
10 any additional site improvements.

11 All relevant mitigation included in this EIR would apply to any additional construction necessary
12 to implement this mitigation measure.

13 *Vol. II, Chapter 3, Response to Comments, Master Response 11 (Freight), Page 3-54, Line 38 to Page 3-*
14 *55, Line 10 is modified as follows:*

15 ~~Commenters note that power systems naturally create EMFs, and that EMFs can cause~~
16 ~~electromagnetic interference (“EMI”). The U.S. utility electric system covers the country~~
17 ~~with hundreds of thousands of miles of high voltage (>60 kilovolt [kV]) transmission~~
18 ~~lines and millions of miles of distribution lines operating at voltages up to 25 kV, both~~
19 ~~three phase and single phase. Union Pacific operates its railroad every day in close~~
20 ~~proximity to these electric utility power systems and associated distribution and~~
21 ~~transmission lines. The power system EMFs do not cause EMI that interferes with either~~
22 ~~the safe or dependable operation of the railroad. This is because the practices and steps~~
23 ~~necessary to achieve and demonstrate electromagnetic compatibility (“EMC”) between~~
24 ~~railways and electric utility power systems are conventional, fully understood, and~~
25 ~~routine, within the U.S. and around the world. The practices and steps necessary to~~
26 ~~achieve and demonstrate EMC between electrified and non-electrified railways are~~
27 ~~similar to those used for electric utility power systems, and are also conventional, fully~~
28 ~~understood, and routine.~~

29 *Vol. II, Response to Comments, Master Response 11 (Freight), Page 3-55, the following text is added*
30 *after Line 32:*

31 There are many portions of the NEC where freight and electrified trains share tracks
32 such as the Providence-Worcester Line. According to the Northeast Corridor Master
33 Infrastructure Plan⁴, on a typical day, seven freight railroads operate up to 50 trains
34 over Amtrak-owned portions of the NEC. The only portions of the entire NEC network
35 without active freight service are between Queens, NY and Newark, NJ and between
36 Landover, MD and Washington DC. The Acela operates between Washington, DC, New
37 York, and Boston, which means that electrified passenger rail and freight are sharing the
38 NEC for the vast majority of the electrified service area. Figures A and B below show

⁴ NEC Master Plan Working Group. 2010. Northeast Corridor Master Infrastructure Plan. Working Group includes representatives of 12 states, the District of Columbia, Amtrak, FRA, 8 commuter and 3 freight railroads operating on the NEC. May. Available: <http://www.amtrak.com/ccurl/870/270/Northeast-Corridor-Infrastructure-Master-Plan.pdf>.

1 shared right of way operations of the electrified Acela service with non-electrified
2 Providence & Worcester freight rail and specifically show diesel freight trains operating
3 “under the wires” of electrified OCS for electrified passenger trains. Any signal systems
4 in such segments are in shared use by both electrified passenger trains and non-
5 electrified freight trains. The Acela and freight have been operating successfully and
6 safely for many years on the NEC. There are also shared rail systems in Europe and
7 Russia and in Chile where diesels are running “under the wire”.



Low speed freight trains and high-speed passenger trains operating at up to 150 mph share the NEC right-of-way as illustrated here by Amtrak Acela Express operating with Providence & Worcester.

8
9 **Figure A: Photograph of Shared Acela and Freight Operations on the Northeast Corridor**
10 **(Source: NEC Master Plan Working Group. 2010)**



RRPictureArchives.NET Image Contributed by John Wallace

1 **Figure B: Photograph of Providence and Worcester freight railroad operating on shared**
2 **tracks with electrified 25 kV overhead contact system overhead on the Northeast Corridor**

Revisions to the CEQA Findings

Introduction

This document provides revisions to the CEQA Findings regarding Impact CUMUL-14-TRA, Cumulative effects to transportation and traffic (localized traffic and freight service during operation) and Mitigation Measure TRA-CUMUL-3

For Freight Service Operation

Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore ~~the Lafayette Pedestrian Overpass location~~

If use of a “neutral section” at the San Francisquito Bridge is not feasible, then Mitigation Measure TRA-CUMUL-3 would be limited to track lowering at the Lafayette Pedestrian Overpass (MP 43.65) to allow Plate H clearance to be able to access the Butterhouse Spur. The residual cumulative impact would be a future constraint on train equipment to existing freight heights from the Butterhouse Spur to Bayshore to Plate F+ (18.92’) instead of the current possible Plate H (20.25’) clearance. While it is not likely that freight will be diverted to truck modes due to this change, given that existing Plate H equipment is not used on this portion of the corridor, it is possible there might be a mode shift for some of the future freight growth. As discussed in Section 4, Other CEQA – Required Analysis of the FEIR, this would not be a significant regional traffic, air quality or GHG emissions cumulative impact, but might result in some localized noise or traffic impacts, depending on location of truck haul routes, timing, and intensity. This is considered a significant and unavoidable impact, primarily due to the effect on the San Francisquito Bridge. Due to the cost and environmental impact associated with replacement of the San Francisquito Bridge, it is considered infeasible for Caltrain to fully mitigate this minor lowering of vertical clearance heights by replacement of the bridge.

However, if Plate H clearance can be provided at the San Francisquito Bridge through use of a OCS “neutral section”, then Mitigation Measure TRA-CUMUL-3 would require track lowering and/or neutral sections (if feasible) at additional locations to allow Plate H equipment operation from San Jose to Bayshore. In this scenario, Plate H clearance would be provided from San Jose to Bayshore, similar to that available today (but not utilized) and there would not be a potential for shift of freight from rail to truck modes and this impact would be mitigated to a less than significant level.

Revisions to the Mitigation Monitoring and Reporting Program

Introduction

This document provides revisions to the Mitigation Monitoring and Reporting Program regarding Mitigation Measure TRA-CUMUL-3

Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore the Lafayette Pedestrian Overpass location

Caltrain and freight operators share responsibility for the potential constraints that may occur due to the combination of a change in freight operating equipment and the installation of the OCS.

Bayshore to Butterhouse Spur (MP 41.4)

If freight operators identify a plan to operate freight railcars along the Caltrain corridor between Bayshore and the Butterhouse Spur (MP 41.4) that would be hindered by the OCS installation compared with existing conditions, then Caltrain and freight operators shall evaluate the feasibility to provide Plate H effective vertical height clearances where needed along this segment of the Caltrain corridor.

The evaluation shall first include a feasibility assessment of a “neutral section”, or unelectrified segment, for the San Francisquito Bridge. If the use of a “neutral section” is feasible without compromising project service improvement objectives or safety, then a combination of track lowering and “neutral sections” (if feasible) shall be used to provide Plate H clearance between Bayshore and the Butterhouse Spur (MP 41.4).

Based on current analysis (see Table 4-23) apart from San Francisquito Bridge, additional vertical clearance height would be required at the following locations to support Plate H equipment: Oyster Point Parkway (MP 8.60, +0.1’), Signal Bridge (MP 9.10, +0.7’), San Antonio Avenue (MP 34.0, +0.63’), Highway 85 (MP 36.5, +0.15’), Pedestrian Overpass (MP 39.40, +0.44’) and Lawrence Expressway (MP 40.75, +.16’).

If a “neutral section” is not feasible at the San Francisquito Bridge and thus the entire segment would be constrained by the low point at the San Francisquito Bridge, then no further improvements are required between Bayshore and the Butterhouse Spur.

Butterhouse Spur (MP 41.4) to MP 52.0

If freight operators identify a plan to operate freight railcars along the Caltrain corridor between MP 52.0 and the Butterhouse Spur (MP 41.4) that would be hindered by the OCS installation compared with existing conditions, then Caltrain and freight operators shall implement site improvements to restore effective vertical height clearances where needed along the Caltrain corridor.

1 Based on current analysis, the only proposed improvement in addition to the Proposed Project
2 tunnel notching/track lowering at the four San Francisco tunnels and the track lowering at
3 Hedding Avenue (MP 46.15), San Carlos Avenue (MP 47.89), Curtner Avenue (MP 50.59), a
4 private overpass (MP 51.08), would be track lowering at the Lafayette Pedestrian Overpass (MP
5 43.65).

6 **Both Segments**

7 Track lowering is a possible solution to rectify the reduction in clearance at constrained bridge
8 overcrossings, but further study will be required to determine the condition of track subgrade in
9 each specific area and to locate existing utilities that may impact the track lowering. If it is
10 determined existing utilities are in the way of potential track lowering, the existing utilities will
11 have to be relocated in order to achieve the desired clearance.

12 Caltrain and the freight operators shall apportion any cost pursuant to the existing agreement
13 between the parties.

14 Presuming that any identified improvements will be implemented by an entity that is subject to
15 CEQA, those improvements would need to be analyzed for their environmental impacts, as
16 warranted, to determine if any additional significant impacts beyond those disclosed in this EIR
17 for clearance improvements (e.g., those described in Chapter 2, *Project Description*).

18 Environmental clearance shall be obtained, if necessary and required, prior to construction of
19 any additional site improvements.

20 All relevant mitigation included in this EIR would apply to any additional construction necessary
21 to implement this mitigation measure.