

UPRR Audit No. \_\_\_\_\_  
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(Execution Copy)

**ELECTRIFICATION AGREEMENT BETWEEN UNION PACIFIC RAILROAD  
COMPANY AND PENINSULA CORRIDOR JOINT POWERS BOARD REGARDING  
CALTRAIN PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

This Electrification Agreement regarding the Caltrain Peninsula Corridor Electrification Project is entered into this 5th day of December, 2016, by and between Union Pacific Railroad Company ("**UPRR**") and the Peninsula Corridor Joint Powers Board ("**JPB**") with respect to the following recitals:

**RECITALS**

A. UPRR owns, operates, maintains, and dispatches a significant network of critical freight rail routes in California that also host both intercity and commuter passenger rail service. UPRR plays a vital role for both the national and the state economies by maintaining and expanding its ability to move freight by rail; to serve the state's ports and other shippers; and to relieve the state's crowded highway network by facilitating the transportation of goods by rail rather than truck, thus reducing traffic congestion, air-pollutant emissions, greenhouse gas emissions, and energy consumption. UPRR operates on its own rights of way and under agreement on rights of way owned by other entities.

B. JPB is a public entity consisting of members from the City and County of San Francisco, the San Mateo County Transit District, and the Santa Clara Valley Transportation Authority. JPB was created through a Joint Powers Agreement among these members to operate the Peninsula Corridor Service for the benefit of communities between San Francisco and Gilroy. JPB's commuter service, known as Caltrain, provides transportation for communities on the Peninsula and is an integral part of the San Francisco Bay Area transportation system.

C. On December 20, 1991, Southern Pacific Transportation Company ("**SPTC**"), predecessor in interest to UPRR, and JPB entered into a Trackage Rights Agreement ("**UPRR TRA**") whereby UPRR reserved its rights to conduct perpetual and exclusive freight and intercity passenger service from San Francisco (MP 0.147 under the UPRR TRA; now known as JPB MP 0.00) to Control Point ("**CP**") Lick (MP 51.4 under the UPRR TRA; now known as JPB MP 50.94 and UPRR MP 51.64). Pursuant to a purchase and sale agreement between JPB and SPTC dated November 22, 1991, JPB acquired (i) all of the mainline trackage from San Francisco (MP 0.147 under the UPRR TRA; now known as JPB MP 0.00) to CP Coast (MP 44.0 under the UPRR TRA; now known as JPB MP 43.93 and UPRR MP 44.7); and (ii) all of the mainline trackage

between CP Coast and CP Lick, except Main Track 1 from CP Coast to CP Lick. Further, pursuant to the UPRR TRA, JPB agreed not to materially impair or interfere with horizontal or vertical line clearances from the tracks between San Francisco and CP Lick. At present, in accordance with the UPRR TRA, JPB controls all signaling and dispatching operations on the railroad track owned by JPB from San Francisco to CP Lick.

D. JPB's Peninsula Corridor Electrification Project (the "**Project**" or "**PCEP**") will electrify the railroad track owned by JPB from San Francisco (JPB MP 0.00) to San Jose at JPB MP 49.2 ("**SF-San Jose Line**"). JPB has agreed not to electrify Mainline Track 1 between CP Coast and CP Lick. As part of the Project, JPB will switch from conventional diesel-hauled trains to Electric Multiple Unit trains ("**EMUs**") and construct a 25 kV electrification system to provide power for the EMUs on the SF-San Jose Line

E. On December 20, 1991, SPTC and JPB entered into a Trackage Rights Agreement ("**JPB TRA**") whereby JPB obtained the right to conduct commuter operations over UPRR's rail line from CP Lick to Gilroy, while UPRR retained its right to provide freight service from CP Lick to Gilroy. Pursuant to the JPB TRA, UPRR owns all of the mainline trackage and real property between CP Lick and Gilroy ("**San Jose-Gilroy Line**"). The parties recognize that JPB's operations pursuant to the JPB TRA will not be electrified as part of the PCEP.

F. JPB and UPRR now wish to enter this agreement to describe further terms related to JPB's Project on the SF-San Jose Line.

## **AGREEMENT**

Now, therefore, the parties agree as follows:

### **Section 1. Incorporation of Recitals.**

The recitals set forth above are hereby incorporated into the terms of this agreement.

### **Section 2. Defined Terms.**

2.1 "**Adverse Impact**" means a disruption of normal railroad operations or the creation of an unsafe condition or work environment arising from 1) electromagnetic interference in connection with construction or operation of JPB's Project; or 2) changes made to railroad track geometry (including clearances), track circuitry, signal equipment or at-grade warning systems in connection with JPB's Project; or 3) a fault event, physical interference from the electrified system, or maintenance of the electrified system.

2.2 "**ARRA**" means the American Recovery and Reinvestment Act of 2009.

- 2.3 “**Assumed Condition**” has the meaning set forth in Section 6.5.1.
- 2.4 “**Confidential Information**” has the meaning set forth in Section 11.
- 2.5 “**Costs**” has the meaning set forth in Section 4.2.1.
- 2.6 “**CPUC**” means the California Public Utilities Commission.
- 2.7 “**CPUC Requirements**” has the meaning set forth in Section 6.2.
- 2.8 “**Electrified Service**” means electrified rail operations on the SF-San Jose Line following the completion of the Project.
- 2.9 “**Final Model**” has the meaning set forth in Section 6.5.4.
- 2.10 “**Force Majeure Event**” has the meaning set forth in Section 12.
- 2.11 “**FRA**” means the Federal Railroad Administration.
- 2.12 “**Initial Model**” has the meaning set forth in Section 6.5.2.
- 2.13 “**Overhead Contact System**” or “**OCS**” means the system that comprises the aerial supply system that delivers 25 kV traction power from the substations to the pantographs of the electric trains, and includes the catenary system messenger and contact wires, auxiliary wires and hangers, associated supports and structures (including poles, portals, headspans, and their foundations), manual and/or motor operated isolators, insulators, phase breaks, conductor terminations and tensioning devices, downguys, and other overhead line hardware and fittings.
- 2.14 “**Project**” means the Peninsula Corridor Electrification Project.
- 2.15 “**Project Work**” means all materials acquired and all work done by UPRR or UPRR contractors in relation to the design, construction, and maintenance of the Project, including design review, construction of temporary track and other temporary or permanent railroad facilities, flagging, inspections, mobilization and demobilization pursuant, work of an emergency nature, assistance provided by UPRR in connection with permits and government approvals, and all other activities that arise within the scope of this agreement.
- 2.16 “**Providing Party**” has the meaning set forth in Section 11.
- 2.17 “**PTC**” has the meaning set forth in Section 6.3.
- 2.18 “**Rail Safety Act**” has the meaning set forth in Section 6.3.
- 2.19 “**Revised Model**” has the meaning set forth in Section 6.5.3.

### **Section 3. Design and Construction.**

3.1 Permits. JPB is solely responsible, at no cost to UPRR, for obtaining all permits or other governmental approvals required for the construction of the Project, including for any necessary safety or mitigation features.

3.2 Coordination and Construction Protocol. In connection with construction and testing of the Project, JPB will implement all measures necessary to ensure safety, minimize operational impacts to UPRR and any other rail carrier, and prevent any Project-related interruption of freight or other railroad operations. To assist in achieving these objectives, at least 60 days before Project construction begins, JPB and its contractors, in consultation with UPRR, will develop and agree to a communications and coordination protocol ("Protocol") that is acceptable to UPRR. The Protocol will require, at a minimum, that (i) JPB provide UPRR with construction schedules and plans on a weekly basis, including a three-week look-ahead for scheduled activities, (ii) UPRR will have the right to review and comment on such schedules and plans, (iii) UPRR may designate a representative who will participate in weekly meetings with JPB concerning the progress of construction and scheduled activities, and (iv) JPB will reimburse UPRR for any actual costs incurred by UPRR in connection with this Section 3.2. Any work on the Project will not be scheduled to unreasonably delay or impair UPRR's freight service, or the operation of UPRR's tenant railroads, on the SF-San Jose Line. Any planned interruption of UPRR's freight service, or the operation of UPRR's tenant railroads, must be proposed to UPRR at least 30 days in advance, and will be subject to UPRR's review and approval, which approval will not be unreasonably withheld.

3.3 Clearances. JPB will maintain the minimum vertical and horizontal clearances on the SF-San Jose Line as set forth in the UPRR TRA, with the following exceptions: (i) the clearances for Tunnel 1 (JPB MP 1.34) and Tunnel 2 (JPB MP 1.87) will be no less than the clearances for the Plate E Static Envelope depicted in Exhibit 1 for Tunnel 1 and the Plate E Static Envelope depicted in Exhibit 2 for Tunnel 2, and in each case will accommodate, at a minimum, Plate E clearances; (ii) the clearances for Tunnel 3 (JPB MP 3.25) and Tunnel 4 (JPB MP 4.44) will be no less than the clearances for the Plate F Static Envelope depicted in Exhibit 3 for Tunnel 3 and the Plate F Static Envelope depicted in Exhibit 4 for Tunnel 4, and in each case will accommodate, at a minimum, Plate F clearances; (iii) the vertical clearances at the San Francisquito Bridge (JPB MP 29.57) will be no less than 19.81 feet and will accommodate, at a minimum, Plate F clearances; and (iv) the vertical clearances at San Antonio Avenue (JPB MP 33.92) will be no less than 20.75 feet and will accommodate, at a minimum, Plate F clearances. The Clearance Assessment Summary, attached as Exhibit 5, sets forth the plate clearances to be maintained (at a minimum) throughout the SF-San Jose Line. Notwithstanding the clearances identified herein, additional measures will be taken by JPB to accommodate special high or wide load movements to achieve clearances that UPRR has historically needed to accommodate such movements. Such clearances will be no less than those set forth in Exhibit 6. At the San Francisquito Bridge, JPB agrees to temporarily de-energize and lift the overhead wire to achieve the

necessary clearance for the high or wide load movements. Similarly, at San Antonio Avenue, JPB agrees to temporarily de-energize the overhead wire to allow for Plate H or Plate K clearance. JPB and UPRR agree that special measures involving temporary de-energization or lifting of the overhead wires are to be conducted during overnight hours and with coordination between UPRR and JPB.

3.4 No Interference With UPRR Operations. Prior to construction of the Project, JPB will develop and provide to UPRR for comment, a plan for UPRR's continued access to and use of its trackage rights pursuant to the UPRR TRA, and a plan for continued functioning of all necessary railroad signals and dispatching facilities ("Access Plan"). UPRR will provide JPB with written comments on the Access Plan within thirty (30) days of its receipt. If UPRR provides written comments, UPRR and JPB will meet to discuss comments to resolve any disputes and endeavor in good faith to make any changes necessary in the Access Plan.

3.5 Disclaimer of Liability or Warranty. Notwithstanding UPRR's review and comment on the Access Plan, UPRR will not be liable for the structural design of the Project or any deficiencies in the design of the Project, and makes no warranties of any kind, express or implied, including the warranty of fitness for a particular purpose or the accuracy or completeness of any information it provides to JPB. UPRR assumes no responsibility or liability for the quality of materials or workmanship, for conformity of the Project to government approvals, or for the acts or omissions of JPB, JPB's contractors, or anyone retained by or acting on behalf of JPB or its contractors.

#### **Section 4. Payment of Costs.**

4.1 Project Benefits. The parties agree that a basic premise underlying this agreement is that construction of the Project is for JPB's benefit, and that UPRR will not be required to contribute to the cost of the Project.

#### 4.2 Reimbursement to UPRR by JPB.

4.2.1 **Reimbursement of Costs.** JPB will reimburse UPRR for all Costs related to UPRR's cooperation with the design and construction of the Project. For purposes of this agreement, "**Costs**" means all actual costs and expenses incurred by UPRR or a UPRR contractor in the performance of any of the Project Work, and all costs and expenses of labor, travel, lodging, meals, supplies, and materials incurred for or in connection with UPRR's performance of the Project Work, including delivery charges and UPRR's additives (including direct and indirect labor additives and overhead). Additives are subject to periodic adjustments by UPRR, in its sole discretion upon written notice to JPB and without requiring an amendment to this agreement, consistent with UPRR's federally audited labor additive rates for all direct and indirect overhead labor costs. For purposes of this agreement, actual costs for materials provided by UPRR will be UPRR's then-current unit charge-out price at the time of installation plus applicable additives.

4.2.2 **Use of Federal Funds.** UPRR acknowledges that when JPB will be using federal funds to reimburse UPRR for Project Costs, the Costs must meet the requirements of 48 CFR Part 31, et seq., and 2 CFR Part 1201, et seq., to be paid using federal funds. Unavailability or ineligibility of federal funds will not excuse JPB's obligation to reimburse UPRR for Project Costs.

4.3 **Emergency Work.** JPB agrees to reimburse UPRR for work of an emergency nature on facilities owned or maintained by UPRR when the need for such work was caused by any act or omission of JPB or its contractors in connection with the construction of the Project, or when UPRR reasonably deems such work necessary for the immediate restoration of access to its trackage rights, of railroad operations, or for the protection of persons on UPRR property in or about the vicinity of the construction area. Such work may be performed by UPRR without the prior approval of JPB, provided that UPRR will give prompt notice of the performance of any such work in advance, if reasonably practicable under the circumstances, or, if prior notice is not reasonably practicable, then promptly following such work.

4.4 **Repayment of Costs.** JPB's obligation to reimburse UPRR for UPRR's Costs is separate and independent from any agreements related to funding for the Project between JPB and any other third party. In no event will UPRR have any obligation with respect to any required repayment of all or any portion of state or federal funds used in the design, construction, or maintenance of the Project, except as may be required under applicable law. JPB agrees that if UPRR is required to repay funds because of legal limitations on JPB's use of those funds, JPB will reimburse UPRR from another source for Project Costs.

## **Section 5. At-Grade Crossings.**

5.1 **Changes To Existing At-Grade Crossings.** JPB has represented to UPRR that the Project will include changes to the signal systems and physical layouts of existing at-grade crossings, including, but not limited to, the elimination of constant warning time technology and the addition of new physical components necessary for JPB's electrical facilities.

5.2 **Design of At-Grade Crossing Warning Systems.** JPB represents that it will design at-grade crossings on the SF-San Jose Line to achieve warning times for freight and passenger crossings that are as close to the currently-existing constant warning times as possible and in no event will freight warning times be shorter than UPRR standards. Once JPB develops a design plan for its at-grade crossing warning systems, it will submit the design to UPRR for review and comment. JPB will not unreasonably refuse implementation of UPRR's comments, provided such comments do not violate applicable FRA regulations.

5.3 **Governmental Authorizations.** As between JPB and UPRR, JPB will be solely responsible for obtaining CPUC General Order 88-B or other governmental authorizations or approvals from the applicable road authority or other governmental

entities (including, if applicable, courts) with jurisdiction over a proposed change to at-grade crossings that may be legally required for the construction, operation, or maintenance of the Project. Notwithstanding any other term of this agreement, JPB will not begin and will not authorize others to begin, construction work on a project to construct or modify a street, highway, or pedestrian at-grade crossings, until JPB has obtained any necessary governmental authorizations or approvals necessary for such construction to commence.

## **Section 6. JPB's Electrification System.**

6.1 Project Components. JPB's Project will use a 25 kV alternating current electrification system to provide power for its EMU trains. The electrification system components include (a) the OCS, (b) Autotransformer feeder; and (c) a traction power return system (collectively, "**TES**"). Traction power substations, switching stations, paralleling stations, and electrical supply stations are also included in the Project.

6.2 Requirements for California Public Utilities Commission ("CPUC") Approval. JPB is seeking approval from the CPUC of safety and operating rules applicable to the Project, which operating rules are attached as Appendix A to CPUC Proposed Resolution No. SED-2, which was published for public comment on October 7, 2016 (the "**CPUC Requirements**"). JPB and UPRR participated in meetings with CPUC staff related to the development and approval of the CPUC Requirements. UPRR does not object to the adoption of the CPUC Requirements in the form attached as Appendix A to CPUC Proposed Resolution No. SED-2 as published on October 7, 2016. JPB and UPRR acknowledge that any approvals, resolutions, or rules issued by the CPUC on this subject are minimum standards. JPB and UPRR intend for standards and requirements set forth in this agreement, including Section 6, to impose greater or additional requirements beyond the CPUC Requirements. By executing this agreement, neither UPRR nor JPB waives or limits its ability (1) to participate in any future informal or formal proceedings before the CPUC relating to the Project; (2) to comment upon any public comment submitted by a third party in connection with the CPUC Requirements or Proposed Resolution No. SED-2; or (3) to comment upon the CPUC Requirements should they be revised from the form included as Appendix A to Proposed Resolution No. SED-2 in the October 7, 2016 public notice.

6.3 Positive Train Control. The Rail Safety Improvement Act of 2008 (the "**Rail Safety Act**"), mandates that all Class I railroads and all entities providing regularly scheduled intercity and commuter rail passenger transportation must implement a positive train control ("**PTC**") system on significant portions of the national rail network by December 31, 2018. PTC is an integrated communication and control system that is being developed to prevent train-to-train collisions, over-speed derailments, incursions into established employee working zones, or movement through a mainline switch in an improper position. PTC systems are mandated to be interoperable so that trains moving over tracks of multiple railroads can communicate with and respond to each railroad's PTC system.

6.3.1 As of the date of this agreement, JPB intends to implement a Communications Based Overlay Signal System ("**CBOSS**") PTC system on the SF-San Jose Line.

6.3.2 As of the date of this agreement, UPRR intends to implement an Interoperable- Electronic Train Management System ("**I-ETMS**") PTC system on the interstate rail network which it controls and dispatches, including in California.

6.3.3 JPB has agreed to implement a Wabtec I-ETMS PTC solution for its passenger rail operations on the San Jose-Gilroy Line that is compliant with applicable law and the Association of American Railroads' Positive Train Control Interchange Agreement for ITC PTC Systems.

6.3.4 JPB acknowledges that both the CBOSS and I-ETMS PTC systems must be protected from Adverse Impacts relating to the Project, and that JPB will bear all costs to ensure that the PTC systems of each party function properly in the newly electrified environment.

6.4 Impact of Electromagnetic Fields. As of the date of this agreement, JPB and UPRR each believe that:

6.4.1 Energization and operation of the Project will create electromagnetic fields whose strength and range will vary depending on several factors.

6.4.2 Energization and operation of the Project may cause interference with the operation of conventional railroad signals, communication systems, at-grade crossing warning devices, or other railroad technology or equipment located or operating near the Project, all of which are critical to ongoing freight and passenger operations in JPB's corridor.

6.5 Prevention and Mitigation of Adverse Impacts. In order to prevent and mitigate Adverse Impacts, the parties agree as follows:

6.5.1 **Modeling, Simulations, and Field Testing to Identify Adverse Impacts.** JPB will prepare design standards and plans for its Project using computer modeling, simulations, and field testing to identify Adverse Impacts caused by the Project on freight railroad facilities, operations, property, equipment, and personnel (collectively, "**Freight Facilities and Operations**") located on or near the SF-San Jose Line. Based on such modeling, simulations, and field testing, JPB will develop measures intended to prevent and mitigate Adverse Impacts to Freight Facilities and Operations. In preparing such models, design standards, and plans to identify Adverse Impacts and potential prevention or mitigation measures, and in conducting any related testing pursuant to this Section 6, JPB will proceed on the basis that freight railroad equipment used on the SF-San Jose Line is in compliance with applicable regulatory standards (the "**Assumed Condition**"). If an Adverse Impact is discovered that affects Freight Facilities and Operations, and freight railroad equipment is not in the Assumed



Condition, JPB will not be required to mitigate such an Adverse Impact to the extent caused by freight railroad equipment not being in the Assumed Condition. However, JPB will be required to mitigate such an Adverse Impact if the Adverse Impact would have affected Freight Facilities and Operations even if the freight railroad equipment were in the Assumed Condition. In the event that JPB's modeling, simulation, or testing pursuant to this Section 6 identifies an Adverse Impact that is caused solely by a party other than JPB or its agents, JPB will be responsible for notifying UPRR and such third party of such situation, but JPB is not responsible for mitigating such an Adverse Impact caused solely by a party other than JPB.

**6.5.2 Initial Modeling During Design to Prevent Adverse Impacts.** JPB, as part of the design of the Project, will prepare a model ("**Initial Model**") of the anticipated Adverse Impacts that will identify measures intended to prevent such Adverse Impacts. This model will be shared with UPRR as soon as it is available to JPB. Within thirty (30) days after delivery of the Initial Model, UPRR may submit comments and suggestions on the Initial Model and potential Adverse Impacts and possible prevention measures.

**6.5.3 Revised Modeling During Design to Prevent Adverse Impacts.** JPB will revise the Initial Model, taking into consideration the comments provided to JPB by UPRR and such additional studies and information as JPB may develop ("**Revised Model**"). The Revised Model will be provided to UPRR as soon as it is available to JPB. Within thirty (30) days after delivery of the Revised Model, UPRR may submit comments and suggestions on the Revised Model and potential Adverse Impacts and possible prevention measures.

**6.5.4 Final Modeling During Design to Prevent Adverse Impacts.** JPB will prepare a final model ("**Final Model**"), taking into consideration comments received on the Revised Model. The Final Model will be provided to UPRR as soon as it is available to JPB. The prevention measures identified in the Final Model will be incorporated into the final design of the Project in the affected areas.

**6.5.5 Comments from UPRR.** At each stage identified herein, JPB will act in good faith to incorporate comments and suggestions identified by UPRR. At each stage identified herein, UPRR will act in good faith in submitting comments and suggestions to JPB.

**6.6 Pre-Electrified Service Testing and Commissioning to Mitigate Adverse Impacts.** JPB will perform pre-Electrified Service testing and commissioning of the Project to identify any Adverse Impacts on Freight Facilities and Operations. Prior to conducting such tests, JPB will make its proposed testing program available for review and comment by UPRR. JPB will take into consideration any such comments in developing its final testing program. Such tests will include installation of appropriate instrumentation to measure both pre-existing conditions and conditions after commencement of electrified rail testing and commissioning operations by JPB. At the

request of UPRR, JPB will make available the results of such tests as soon as they are available to JPB. UPRR will cooperate in such testing by promptly reporting to JPB any Adverse Impacts observed by UPRR and cooperating in the effort to address any Adverse Impacts, including by working together to identify the cause of such Adverse Impacts, potential means of mitigating such Adverse Impacts, and sharing of data and information regarding the equipment and systems affected by Adverse Impacts. JPB will reimburse UPRR for any costs associated with UPRR's cooperation and/or work to identify (i) the cause of such Adverse Impacts, and (ii) the mitigation measures to be employed. JPB will act in good faith to incorporate comments and suggestions identified by UPRR.

6.6.1 If Adverse Impacts are identified by the tests performed by JPB or identified by UPRR and reported to JPB, JPB and UPRR will work together to identify measures to mitigate the Adverse Impacts, and JPB will implement such measures based upon the principles set forth herein. Notwithstanding the foregoing, JPB will select, in its discretion the type of mitigation measures to be implemented on JPB's property or equipment, provided that such measures (including any revisions or additions thereto) result in full mitigation of the identified Adverse Impacts on UPRR.

6.6.2 After implementation of the mitigation measures for an Adverse Impact, JPB will conduct additional tests of its rail system to verify that such Adverse Impact has been fully mitigated. If such an Adverse Impact has not been fully mitigated, JPB and UPRR will cooperatively work together to identify what additional mitigation measures are necessary to complete mitigation of such Adverse Impact. In doing so, the provisions of Section 6 (including its subsections) will be repeated until the Adverse Impact is fully mitigated.

#### 6.7 Location and Maintenance of Prevention or Mitigation Measures.

6.7.1 For any measures identified in Sections 6.5 or 6.6 (including subsections) to prevent or mitigate an Adverse Impact to Freight Facilities and Operations, such measures will be implemented on JPB equipment or property to the extent possible. If the cost of locating the prevention or mitigation measure on JPB equipment or property would be substantially disproportionate to the cost of locating the prevention or mitigation measure on UPRR equipment or property, JPB may request that the prevention or mitigation measure occur on UPRR equipment or property. UPRR will not unreasonably withhold consent to such requests. Regardless of where the prevention or mitigation measure is ultimately located, JPB will bear the cost for such measures.

6.7.2 JPB's responsibility for the cost of prevention and mitigation measures includes any associated costs of maintenance, including UPRR's reasonable and actual cost of maintaining any such measures installed on UPRR equipment or property. If mitigation measures are ultimately located on UPRR equipment or property, UPRR will maintain such measures to the extent they are incorporated into UPRR equipment or

property it already maintains. Under such circumstances, UPRR will maintain the mitigation measures, at the cost of JPB. If prevention or mitigation measures located on UPRR equipment or property are not part of UPRR's normal railroad operation systems for which UPRR already provides maintenance, such measures will be maintained by JPB. If UPRR agrees to allow prevention or mitigation measures on UPRR equipment or property pursuant to this section, UPRR will cooperate to execute any necessary documents with JPB to allow access for such maintenance.

#### 6.8 Adverse Impacts after Commencement of Electrified Service.

**6.8.1 Duty to Monitor Adverse Impacts.** JPB will develop and maintain a protocol for monitoring Adverse Impacts caused after the commencement of its Electrified Service. Such protocol will measure levels of electromagnetic fields, including interference on JPB and UPRR facilities, as well as disruptions to signal equipment, PTC, and at-grade crossing warning systems and other Adverse Impacts. UPRR will have the right to comment on and approve the monitoring protocol, and UPRR will not unreasonably withhold its approval. UPRR will cooperate to allow reasonable access to UPRR property and equipment to take necessary measurements, provided that such access shall not interfere with UPRR operations. Such monitoring will occur on a quarterly basis during the first year of Electrified Service and on an annual basis thereafter. After the fifth full year of Electrified Service, JPB and UPRR will discuss whether annual monitoring for electromagnetic fields and other Adverse Impacts covered by the monitoring protocol should still be required at annual intervals. The annual monitoring protocol will continue unless the parties mutually agree to a different monitoring schedule. In addition to the monitoring described above, JPB will measure induced and/or conducted interference voltage levels on UPRR equipment and facilities at all crossings and wayside signals on a quarterly basis. JPB will maintain the data collected from the monitoring and voltage measurements in accordance with JPB's record retention policy, and JPB will transmit copies of such data to UPRR immediately upon receipt. In the event the collected data reveals excessive step-and-touch potentials (greater than 50v for >300 seconds) or other Adverse Impacts that could cause interference with the safety and reliability of Freight Facilities and Operations, JPB will immediately take all steps necessary to reduce the step-and-touch potentials to a level below 50v for >300 seconds, as well as to prevent and/or stop the interference.

**6.8.2 Duty to Maintain Operations Free from Adverse Impacts.** If an Adverse Impact occurs on Freight Facilities and Operations after Electrified Service begins, UPRR will notify JPB of the Adverse Impact and JPB will immediately take all steps necessary to stop the Adverse Impact, including stopping or slowing trains, de-energizing the TES, or installing mitigation measures as set forth in Sections 6.6-6.7 (including subsections), all at no cost to UPRR. This term shall not prevent or limit JPB from seeking recovery from third parties causing Adverse Impacts.

6.8.3 **Liability for Damages Caused by an Adverse Impact.** JPB will be responsible to UPRR for all damages incurred by UPRR as a result of any Adverse Impact.

6.9 Modifications Post-Electrified Service.

6.9.1 **UPRR Modifications.** At all times after JPB delivers the final design for the Project, UPRR will take the presence and operations of the Project into account when designing and implementing new or modified signal systems, communication systems, and other technology for installation or use in the vicinity of the Project. UPRR will coordinate with JPB in this process and together they will seek to identify appropriate measures or procedures to avoid Adverse Impacts, if any. If modifications are necessary to avoid or stop Adverse Impacts on such new or modified UPRR equipment to be installed in the vicinity of the Project, JPB will be responsible to UPRR for the difference in cost between the new or modified facilities with and without accommodations for the Adverse Impacts.

6.9.2 **JPB Modifications.** If at any time after the Project has been completed, JPB changes its facilities or operations in a way that creates Adverse Impacts that interfere with Freight Facilities and Operations, UPRR will notify JPB of the interference and JPB will immediately take all steps necessary to stop the interference, including stopping or slowing trains, de-energizing the TES, or installing mitigation measures as set forth in Sections 6.6-6.7 (including subsections), all at no cost to UPRR. JPB will be responsible to UPRR for all damages incurred by UPRR as a result of interference with Freight Facilities and Operations.

6.10 Irreparable Harm. JPB and UPRR acknowledge that there will be irreparable harm and no adequate remedy at law for a breach by JPB or UPRR of any provision of Sections 6.5-6.9 (including any subsections). Therefore, UPRR and JPB each have the right to enforce any provision of Sections 6.5-6.9 (including any subsections) through specific performance, injunctive relief, and by any other means available at law or in equity. For purposes of obtaining such relief, JPB and UPRR acknowledge that no provision of Sections 6.5-6.9 (including any subsections) will be construed as requiring continuous judicial supervision or direction. JPB and UPRR each hereby waives any right it may have to seek to remove or modify the requirements of any provision of Sections 6.5-6.9 (including any subsections) by petition to a court, tribunal, the Surface Transportation Board, CPUC, or any other body that may have jurisdiction, and JPB and UPRR each agrees not to seek such relief from any such authority. In addition, JPB will not ask any other party or agency to make such a request. Nothing in this paragraph will be deemed to limit either JPB's or UPRR's right to seek judicial interpretation or enforcement, or interpretation or enforcement through alternative dispute resolution procedures, of any term of this agreement.

## **Section 7. ARRA Reporting.**

If ARRA funds are used for the Project, JPB agrees that it is responsible for performing and completing all ARRA reporting requirements for the Project. JPB acknowledges that Section 1512 of ARRA applies only to a "recipient" receiving ARRA funding directly from the federal government and, therefore, (i) the ARRA reporting requirements are the responsibility of JPB and not of UPRR, and (ii) JPB will not delegate any ARRA reporting responsibilities to UPRR. UPRR will provide to JPB its standard and customary billing and supporting documentation for expenses incurred by UPRR on the Project; provided, that UPRR will, upon request by JPB, provide to JPB any additional information reasonably accessible or available to UPRR that is needed for JPB to perform and complete the ARRA reporting requirements. JPB will furnish to UPRR a list, at least forty five (45) days prior to the date JPB requires such information, setting forth the specific information that JPB requests that UPRR provides in order for JPB to meet its reporting requirements.

## **Section 8. Compliance with Law.**

8.1 Laws Applicable to the Project. JPB and UPRR will comply with all laws and regulations that apply to work done on the Project. Nothing herein is meant to be or will be interpreted to be a waiver of principles of legal preemption or preclusion that may apply to UPRR because of its status as a common carrier regulated by the federal government.

8.2 Compliance with CPUC and FRA Regulations. JPB is solely responsible for ensuring that the design, placement, operation, and maintenance of all features constructed as part of the Project comply with rules and regulations promulgated by the CPUC, the FRA, and any other governmental agency having jurisdiction.

8.3 Federal Flow Down Requirements. The final grant agreement providing federal funding for the Project has not yet been completed, and, therefore, federal flow down requirements for the Project are not yet developed. UPRR acknowledges that, once federal funding for the Project is complete, certain federal flow down requirements will apply to UPRR. JPB acknowledges that certain federal flow down requirements included in a final grant agreement might be inapplicable or unacceptable to UPRR. JPB and UPRR will cooperate in good faith to determine which federal flow down requirements will apply to UPRR.

## **Section 9. Indemnification.**

Notwithstanding the provisions in Section 6 of the UPRR TRA or the JPB TRA, the provisions of this Section 9 will govern indemnification rights and obligations with respect to the Project.

### **9.1 Scope of Indemnification.**

9.1.1 Except when a Claim (defined below) is caused by the sole negligence, willful misconduct or criminal acts of UPRR or its Related Persons (defined below), and to the fullest extent not otherwise prohibited by law, JPB covenants and agrees that it will indemnify, defend, and hold harmless UPRR and its officers, agents, employees, representatives, affiliates, assigns, and successors (collectively, "**Related Persons**") from and against any and all fines, penalties, judgments, awards, settlements, claims, demands, liabilities, obligations, losses, damages, and expenses, including but not limited to reasonable attorney fees and costs (including all reasonable litigation costs incurred by UPRR, including without limitation costs of experts and consultants) (collectively a "**Claim**" or "**Claims**"), when such a Claim arises from or relates to, in whole or in part: (a) the ownership, construction, operation, use, or maintenance of the Project; (b) JPB's failure to comply with any federal, state, or local law, regulation, or enactment; (c) the breach of any provision, covenant, or obligation assumed by or imposed on JPB under this agreement or any other agreement with UPRR; or (d) any negligent act or omission of JPB or a JPB contractor or subcontractor.

9.1.2 Nothing in Section 9.1.1 is intended to or will constitute a waiver of Claims or other rights or remedies by UPRR or any of its Related Persons against JPB or any other person or entity under this agreement or under applicable law. Any limitation of the indemnity rights of UPRR and its Related Persons set forth above does not serve and will not be construed as any limitation, or constitute a waiver, of Claims or other rights or remedies of UPRR or any of its Related Persons. To the extent it may lawfully do so, and as among UPRR and its Related Persons and JPB only, JPB waives any and all defenses under worker's compensation laws, industrial insurance laws, the Government Claims Act (Cal. Govt. Code § 810 et seq), statutory immunities, and procedural defenses to so indemnify, defend, and hold harmless UPRR and its Related Persons.

9.2 UPRR will cooperate fully with JPB in the defense of all Claims. UPRR has the right, in its sole discretion, to appoint independent and separate defense counsel, the identity of which is subject to the reasonable approval by JPB, at JPB's expense pursuant to its obligations under Section 9.1.1, for the defense of any Claim made against UPRR or any of its Related Persons. UPRR's election to appoint defense counsel will not affect JPB's obligation to indemnify, defend, and hold harmless UPRR and its Related Persons from and against all Claims to the extent set forth in this agreement. JPB will not settle any Claims in a manner that would impose any expense, cost, penalty, fine, obligation, liability, or other limitation on UPRR or any of UPRR's Related Persons without UPRR's prior written consent.

### 9.3 Contractors and Subcontractors Indemnification.

9.3.1 Without limiting Section 9.1.1, and to the fullest extent not otherwise prohibited by law, JPB further will require its contractors and subcontractors, as a condition of any work to be performed on the SF-San Jose Line, to indemnify, defend, and hold harmless UPRR and its Related Persons from any Claim arising from or

related to, in whole or in part, the contractor's or subcontractor's activities on, about, or near property owned, operated upon, or used by UPRR, except when a Claim is caused by the sole negligence, willful misconduct or criminal acts of UPRR or its Related Persons.

9.3.2 Nothing in Section 9.3.1 is intended to or will constitute a waiver of Claims or other rights or remedies by UPRR or any of its Related Persons against JPB's contractors or subcontractors or any other entity under this agreement or under applicable law. Any limitation of the indemnity rights of UPRR and its Related Persons set forth above does not serve and will not be construed as any limitation, or constitute a waiver, of Claims or other rights or remedies of UPRR or any Related Persons. JPB will require its contractors and subcontractors, to the extent they may lawfully do so, to waive any and all defenses under workers' compensation and industrial insurance acts to so indemnify UPRR and its Related Persons. Employees of JPB and employees of JPB's contractors and subcontractors will not be deemed joint, dual, or direct employees of UPRR for purposes of the Federal Employers' Liability Act, 45 U.S.C. § 51. JPB will also require its contractors and subcontractors to execute a separate right of entry agreement with UPRR prior to entering UPRR's property or property upon which UPRR operates.

9.4 The parties acknowledge that future changes in the law or judicial interpretations of the law may affect UPRR's liability exposure or safety risks in relation to JPB's construction, operation, use, dispatch, or maintenance of the Project. If either UPRR or JPB sends a notice to the other regarding a change in the law or a new interpretation of the law that could potentially affect the scope, performance, or enforceability of the indemnification or related protections afforded UPRR under this agreement, the parties will meet and negotiate in good faith any amendments to this agreement or other steps, including pursuit of legislation, that may be necessary to achieve the intent set forth in Section 9.1.

9.5 The parties acknowledge that in addition to other state and federal laws that allow indemnity agreements, 49 U.S.C. § 28103(b) specifically authorizes providers of rail passenger transportation to enter into contracts that allocate financial responsibility for claims.

9.6 Except when a Claim is caused by the sole negligence of UPRR or its Related Persons, neither UPRR nor any of its Related Persons will have any obligation or duty of express, implied, or equitable indemnification of any kind to JPB or any of its related persons or entities, whether under this agreement or under applicable law, all of which are hereby disclaimed and excluded.

9.7 The terms of this Section 9 will survive any termination of this agreement, and the termination or expiration of any and all other JPB agreements, and will remain in full force and effect thereafter.

**Section 10. Public Records Act.**

JPB is subject to the California Public Records Act ("**PRA**"). UPRR acknowledges that certain information that it submits to JPB may be maintained as agency records and thus may be subject to public release through individual PRA requests. UPRR acknowledges that JPB may make information related to the expenditure of public funds on this Project available on official government websites. JPB will promptly send UPRR written notice of any PRA requests that JPB receives for information related to UPRR or this agreement. In addition, JPB will provide UPRR with at least ten (10) days prior written notice before disclosing any records related to UPRR or submitted to JPB by UPRR, and JPB will not disclose any Confidential Information of UPRR, the disclosure of which is exempted under Government Code Section 6254(k), the PRA, or other law.

**Section 11. Confidentiality.**

For the purposes of this Section 11, "**Confidential Information**" means any information delivered to either party (the "**Receiving Party**") by or on behalf of the other party (the "**Providing Party**") in connection with the transactions contemplated by or otherwise pursuant to this agreement that is proprietary, privileged, or confidential in nature, provided that such term does not include information that (a) was publicly known or otherwise known to the Receiving Party prior to the time of such disclosure, (b) subsequently becomes publicly known through no act or omission by the Receiving Party or any person acting on the Receiving Party's behalf, or (c) constitutes financial statements that are otherwise publicly available. The Receiving Party will maintain the confidentiality of such Confidential Information in accordance with procedures adopted by the Receiving Party in good faith to protect confidential information of third parties delivered to it, provided that the Receiving Party may deliver or disclose Confidential Information to (a) its directors, officers, employees, agents, attorneys, and affiliates, to the extent such disclosure is necessary to the administration of the transactions contemplated by this agreement, (b) its financial advisors and other professional advisors who agree to hold confidential the Confidential Information in accordance with the terms of this Section, and (c) any other person to which such delivery or disclosure is necessary (i) to effect compliance with any law, rule, regulation, or order applicable to the Receiving Party, (ii) in response to a subpoena or other legal process, or (iii) as may be necessary in the enforcement or defense of any rights a party may have in any dispute resolution proceedings between the parties.

**Section 12. Force Majeure.**

Each party will be temporarily excused from the performance of certain of its obligations under this agreement, except obligations involving indemnification and the payment of money to the other party, during the time when nonperformance of such obligations is caused by a Force Majeure Event. For purposes of this agreement, a "**Force Majeure Event**" means court orders directed at JPB in litigation not initiated by



JPB or the State of California; court orders directed at UPRR in litigation not initiated by UPRR; acts of terrorism; vandalism; riots; insurrection or war; picket lines, strikes, or lockouts by third parties providing labor, material, or services under contract to a party; derailments; wrecks or freight embargoes; inability to procure critical materials; unforeseen catastrophic railroad emergencies anywhere within the UPRR system; accidents; and earthquake, flood, cloudburst, tornado, or other phenomena of nature beyond the power of a party reasonably to foresee or to make preparation in defense against. In all cases, the party asserting a Force Majeure Event as the basis for temporary excuse from performance must, as soon as practicable after learning of the conditions related to the Force Majeure Event, provide written notice of the Force Majeure Event to the other party. The notice must explain the nature of the Force Majeure Event, what obligations in this agreement it affects, the date the Force Majeure Event arose, and an estimate of how long the Force Majeure Event will interfere with the noticing party's ability to perform the affected obligations. The party claiming an excuse from performance under this agreement must take reasonable actions to minimize and mitigate the impact of the Force Majeure Event and promptly resume full performance of the affected obligations upon recovery from or cessation of the Force Majeure Event.

**Section 13. Alternative Dispute Resolution.**

The parties acknowledge that during the course of performance of this agreement, certain disputes may arise that would be appropriate to endeavor to resolve using mediation or other forms of alternative dispute resolution proceedings. The parties will in good faith consider such alternative proceedings, but nothing in this agreement will prevent either party from electing in its sole discretion to pursue any remedies available to it under this agreement or by law.

**Section 14. Termination.**

This agreement may be terminated at any time by mutual written consent of the parties. No other termination is contemplated by this agreement.

**Section 15. Remedies.**

In the event of a breach or default under this agreement by a party hereto, the other party will have all legal and equitable remedies with respect thereto as are authorized by this agreement or as are available under applicable law.

**Section 16. Notice of Litigation.**

Each party will promptly furnish the other party written notice of any claim or litigation naming the notifying party as a defendant and affecting or relating to the Project or this agreement.

**Section 17. Miscellaneous.**

17.1 Governing Law. Except on subjects preempted by federal law, this agreement will be governed by and construed in accordance with the laws of the State of California. Nothing herein is meant to be or will be interpreted to be a waiver of principles of legal preemption or preclusion that may apply to UPRR because of its status as a common carrier regulated by the federal government.

17.2 Attorneys' Fees. In the event of any litigation involving the parties to enforce or interpret any provision of this agreement, to enforce any remedy available upon default under this agreement, or to seek a declaration of the rights of any party under this agreement, the prevailing party will be entitled to recover from the other party to the litigation such attorneys' fees and costs (including the costs of experts and consultants) as may be reasonably incurred. The provisions of this Section will survive the entry of any judgment, and will not merge, or be deemed to have merged, into any judgment.

17.3 Severability. If any provision of this agreement, or the application of a provision to any person, place, or circumstance, is held by a court of competent jurisdiction to be invalid, void, or otherwise unenforceable, such provision will be enforced to the maximum extent possible so as to effect the intent of the parties; or, if incapable of such enforcement or unable to achieve the intent of the parties, will be deemed to be deleted from this agreement, and the remainder of this agreement and such provisions as applied to other persons, places, and circumstances will remain in full force and effect. In such an event, the parties agree to negotiate an amendment to replace or modify any invalid or illegal or unenforceable provision and related provisions with valid, legal, and enforceable provisions that most closely and reasonably approximate the intent and economic effect of the invalid, illegal, or unenforceable provision.

17.4 Interpretation. The section and paragraph headings in this agreement are for convenience only and will not be used for any purpose in the interpretation of this agreement. When the context requires, the plural will include the singular and the singular the plural, and a gender will include the other gender. References to agreements or contracts are to such agreement or contract as may be amended, restated, or otherwise modified from time to time. The words "include," "includes," and "including" are used without limitation and are deemed to be followed by the phrase "without limitation." Notwithstanding specific references to "good faith," the duty of good faith and fair dealing applies generally with respect to this agreement, except where the context specifically requires otherwise.

17.5 Exhibits. All exhibits to this agreement are incorporated as part of the agreement.

17.6 Calculation of Deadlines. All references to "days" with respect to any deadline will mean calendar days, except that if a deadline falls on a Saturday, Sunday, or California state or federal holiday, the deadline will be postponed to the next day that is not a Saturday, Sunday, or California state or federal holiday.

17.7 Amendments. This agreement may only be modified or changed by written amendment signed by authorized representatives of the parties.

17.8 Relationship of the Parties. Each party is and will at all times be and remain independent from the other party and will not be deemed an agent, fiduciary, partner, joint-venturer, employee, or employer of the other party. Nothing contained herein will have the effect of creating a trust, joint venture, partnership, or employment relationship between the parties. Neither party has any right or power to obligate or bind the other party in any manner whatsoever.

17.9 Assignment of Entire Agreement. Except as provided in this Section, this agreement and any rights and obligations created by it may not be assigned by either party without the prior written consent of the other party. This agreement may be assigned by a party without the prior written consent of the other party only (a) as a result of a merger or corporate reorganization, consolidation, change of control, or sale of substantially all of its assets; (b) to an affiliate of the assigning party, where the term "affiliate" means a corporation, partnership, or other entity controlled, controlling, or under common control with the assigning party; or (c) with respect to any public entity, the transfer of the responsibilities, duties, authority, rights, and obligations of such public entity to another public entity to which such responsibilities, duties, authority, rights, and obligations have been transferred by operation of law. In the event of an assignment, this agreement will be binding upon and inure to the benefit of each of the transferees, successors, and assigns.

17.10 Waivers. Any waiver, modification, consent, or acquiescence with respect to any provision of this agreement must be set forth in writing and duly executed by or on behalf of the party to be bound by it. No waiver by either party of any breach will be deemed a waiver of any other or subsequent breach.

17.11 Notices. Any communication, notice, or demand of any kind whatsoever which either party may be required or may desire to give to or serve upon the other must be in writing and delivered by personal service (including express or courier service) or by registered or certified mail, postage prepaid, return receipt requested, or by a nationally recognized overnight delivery service, in each case addressed as follows:

UPRR: Union Pacific Railroad Company  
Attn: Executive Vice President – Operations  
1400 Douglas Street, Stop 1120  
Omaha, Nebraska 68179  
Telephone: (402) 544-5000

With a copy to:

David M. Pickett  
Law Department  
Union Pacific Railroad Company

10031 Foothills Blvd.  
Roseville, CA 95747  
Telephone: (916) 789-6400

JPB: Peninsula Corridor Joint Powers Board  
1250 San Carlos Avenue  
P.O. Box 3006  
San Carlos, CA 94070-1306  
Attn: Executive Director

With a copy to:

Hanson Bridgett LLP  
425 Market Street, 26th Floor  
San Francisco, CA 94105  
Attn.: Joan L. Cassman

Without requiring an amendment to this agreement, either party may change its address for notice by written notice given to the other party in the manner provided in this Section. Any such communication, notice, or demand will be deemed to have been duly given or served on the date personally served, if by personal service; three (3) days after being placed in the U.S. Mail, if mailed; or one (1) day after being delivered to an overnight delivery service, if sent by overnight delivery.

17.12 No Third-Party Beneficiaries. This agreement is for the exclusive benefit of the parties to it and not for the benefit of any third party.

17.13 Other Agreements. Except to the extent specifically described in this agreement, execution of this agreement will not alter or affect the terms of any other agreements that may exist between the parties.

17.14 Reservation of Rights. Notwithstanding any other provision of this agreement, UPRR reserves all rights to participate in any existing or future proceedings relating to the Project or any other project planned or undertaken by JPB on the SF-San Jose Line. UPRR reserves its right to comment on and challenge, in any forum, any proposals or decisions relating to the Project or any other project planned or undertaken by JPB on the SF-San Jose Line.

17.15 Representations and Warranties. JPB and UPRR each represents, warrants, agrees, and acknowledges that it has the full power and authority and necessary approvals to execute and deliver this agreement and to grant the rights and consummate and perform its respective obligations set forth in this agreement, and that this agreement, when executed and delivered on its behalf, will constitute its valid and legally binding agreement and obligation, enforceable in accordance with its terms. Without limiting the generality of the foregoing, JPB further represents, warrants, agrees, and acknowledges that (i) no additional approvals from any state or other

agency or governing body are required for this agreement to be a fully valid, legally binding, and enforceable agreement; (ii) this agreement, authorized, *inter alia*, pursuant to California Government Code § 14662.5, is a multi-year contract between UPRR and JPB; and (iii) this agreement and the respective rights and obligations of each of the parties to it are authorized and valid pursuant to legally recognized exceptions to the limitations of Article XVI of the California Constitution and the State Budget Act and related statutes and rules with respect to full and timely performance and payments by JPB.

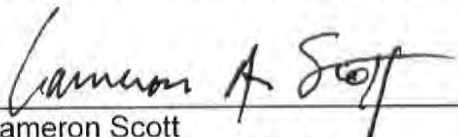
17.16 Authority and Binding Effect. Each individual executing this agreement affirms that he or she has the capacity set forth on the signature pages and has full power and authority to execute this agreement and bind the party on whose behalf he or she is executing the agreement.

17.17 Counterparts. This agreement may be signed in counterparts, each of which will be deemed an original but all of which will together constitute one and the same instrument.

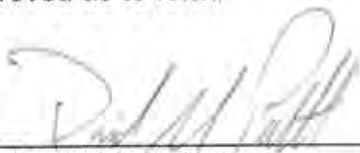
*[Signature Page Follows]*

The parties have executed this agreement effective as of the date first written above.

**UNION PACIFIC RAILROAD COMPANY**

By:   
Cameron Scott  
Executive Vice President and  
Chief Operating Officer  
Union Pacific Railroad Company


Approved as to form:

By:   
David M. Pickett  
Senior General Attorney  
Union Pacific Railroad Company

**PENINSULA CORRIDOR JOINT POWERS BOARD**

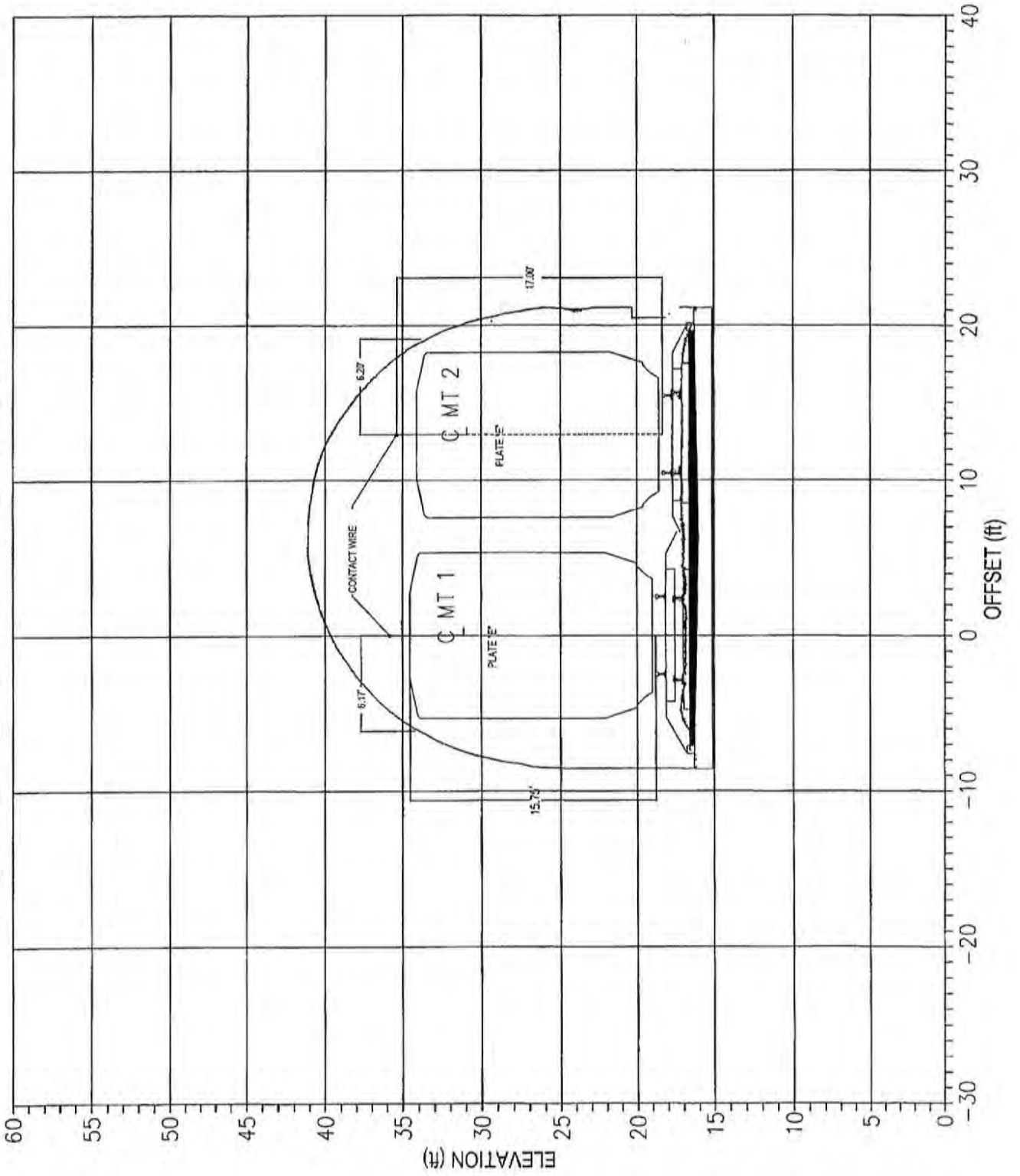
By:   
Jim Harnett  
Executive Director  
Peninsula Corridor Joint Powers Board

Approved as to form:

By:   
Joan L. Cassman  
General Counsel

# **EXHIBIT 1**

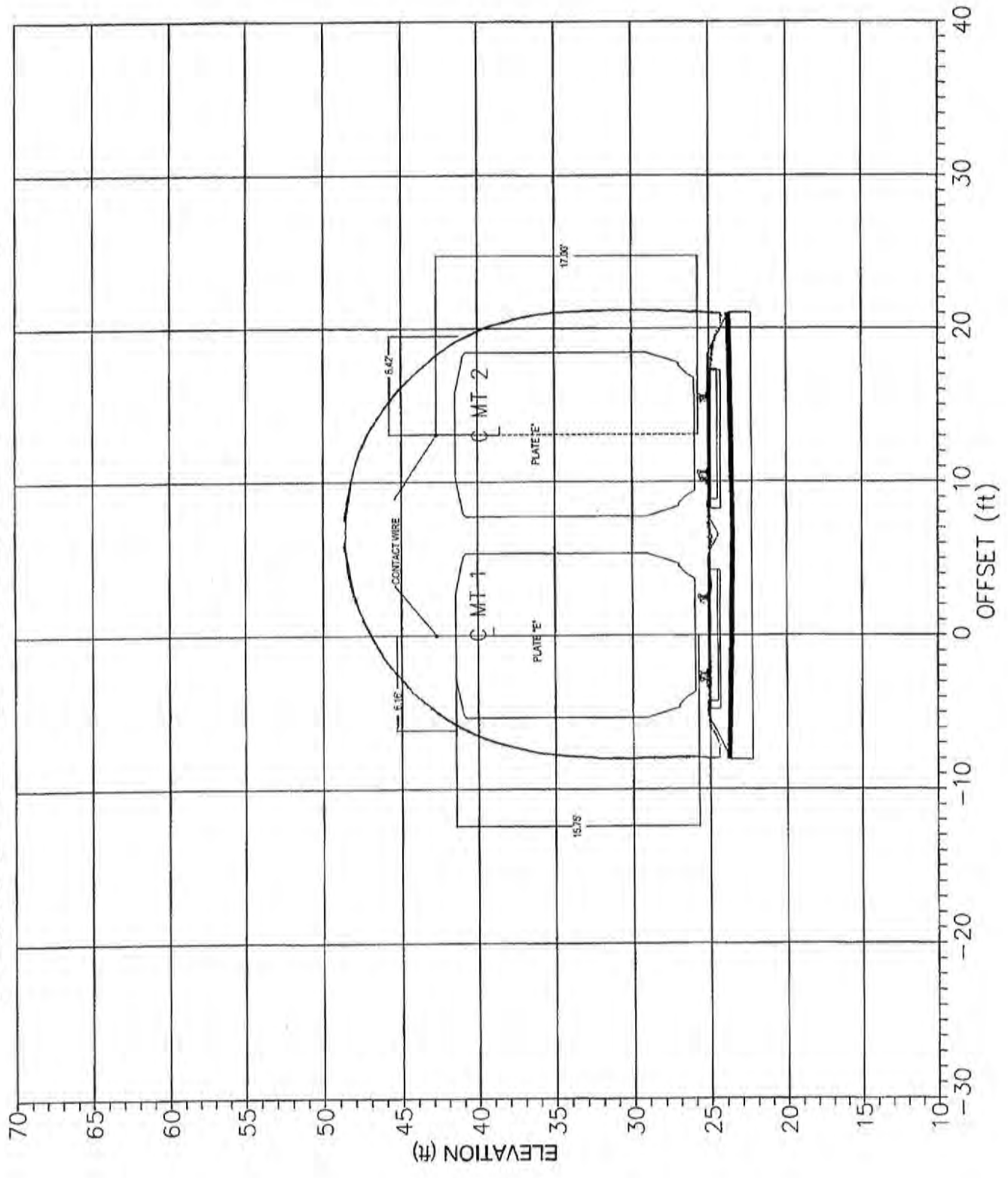
# 265+60 TUNNEL 1 PROPOSED PLATE "E" STATIC ENVELOPE





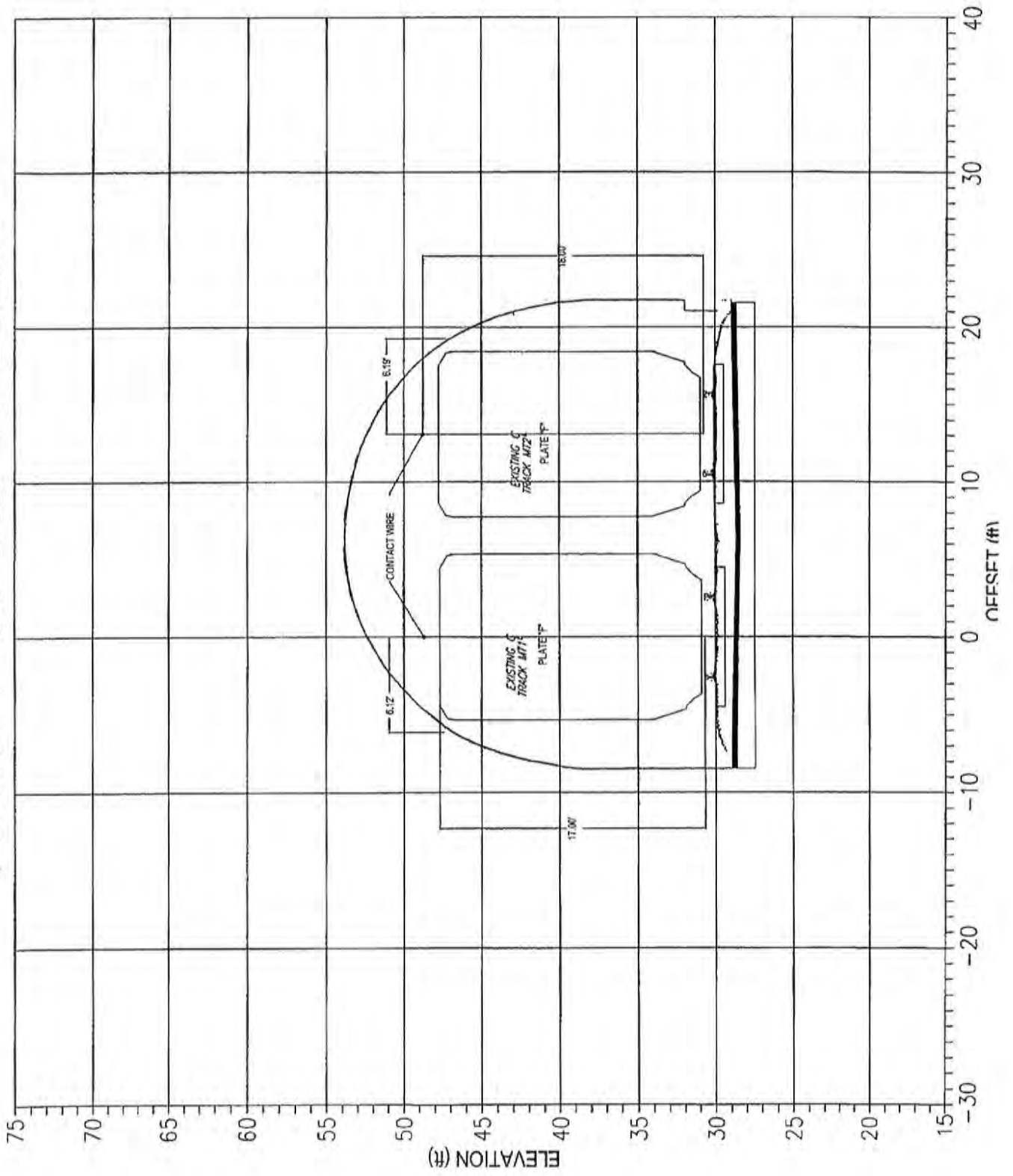
## **EXHIBIT 2**

# 293+40 TUNNEL 2 PROPOSED PLATE "E" STATIC ENVELOPE



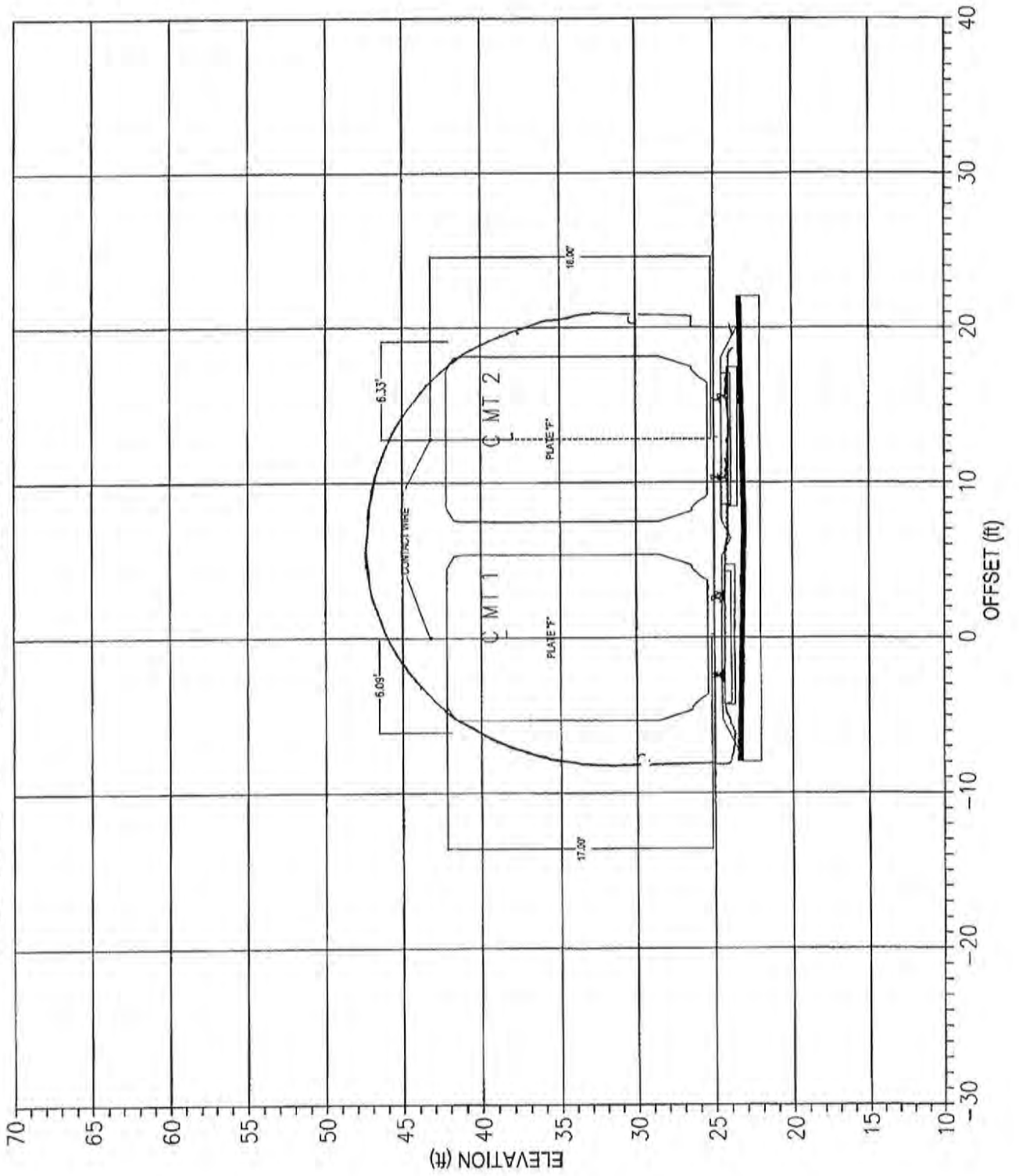
## **EXHIBIT 3**

# 382+60 TUNNEL 3 PROPOSED PLATE "F" STATIC ENVELOPE



## **EXHIBIT 4**

# 430+80 TUNNEL 4 PROPOSED PLATE "F" STATIC ENVELOPE



## **EXHIBIT 5**

## Exhibit - A Clearance Assessment Summary

New Mile Post	Old Mile Post	Bridge/Tunnel Name	Clearance from Rail to Lowest Soffit	Proposed Minimum Clearance from Rail to Contact Wire	Allowable Plate Existing	Allowable Plate With Electrification	Remarks
0.31	0.48	6th Street Off Ramp North Str.	33.10	17.00	Plate E	Plate E	
0.32	0.49	6th Street Off Ramp South Str.	29.04	17.00	Plate E	Plate E	
0.70	0.86	I-280	39.05	17.00	Plate E	Plate E	
1.13	1.27	Maniposa Street	21.01	17.00	Plate E	Plate E	
1.34	1.50	Tunnel No. 1	Varies	17.00	Plate E	Plate E	Tunnel 1 Limits Freight to Plate E.
1.74	1.90	23rd Street	20.83	17.00	Plate E	Plate E	
1.87	2.05	Tunnel No. 2	Varies	17.00	Plate E	Plate E	Tunnel 2 Limits Freight to Plate E.
2.26	2.58	I-280 South Bound	28.22	18.00	Plate F	Plate F	
2.32	2.58	I-280 North Bound	31.06	18.00	Plate F	Plate F	
2.40	2.70	Army Street Off Ramp	23.26	18.00	Plate F	Plate F	
2.98	3.14	Oakdale Avenue	23.18	18.00	Plate F	Plate F	
3.25	3.40	Tunnel No. 3	Varies	18.00	Plate F	Plate F	Tunnel 3 Limits Freight to Plate F.
3.50	3.66	Williams Avenue	23.68	18.00	Plate F	Plate F	
3.99	4.15	Paul Avenue	21.70	18.00	Plate F	Plate F	
4.44	4.60	Tunnel No. 4	Varies	18.00	Plate F	Plate F	Tunnel 4 Limits Freight to Plate F.
6.48	6.64	Tunnel Avenue	24.24	22.00	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
7.54	7.70	Highway 101	24.96	22.00	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
7.67	7.80	Sierra Point Parkway	23.37	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
8.49	8.62	Oyster Point Blvd.	22.69	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
9.09	9.23	Grand Avenue West Bound	28.31	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
9.11	9.23	Grand Avenue East Bound	26.50	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
9.27	9.39	Highway 101 North Bound	23.21	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
9.28	9.41	Highway 101 South Bound	27.32	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
10.68	10.82	I-380	24.41	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
13.47	13.63	Pedestrian Crossing (Millbrae Sta)	24.87	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
13.55	13.70	Millbrae Avenue	23.30	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
19.00	19.12	State Route 92 West Bound	34.22	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
19.02	19.16	State Route 92 East Bound	22.83	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
26.08	26.15	State Route 84	23.08	21.12	Plate F	Plate F	Plate H would fit under bridge, but San Francisco Bridge MP 29.69 restricts to Plate F movement.
29.57	29.69	San Francisco Bridge	21.67	19.81	Plate F	Plate F	Plate H will clear with OCS De-energized. Physical clearance is 6" to De-energized Contact Wire.
33.92	34.05	San Antonio Avenue	22.14	20.75	Plate F (See Remarks)	Plate F (See Remarks)	
35.57	35.60	Shoreline Boulevard	23.92	21.12	Plate H	Plate H	
36.35	36.49	Slevens Creek Pedestrian Crossing	24.43	21.12	Plate H	Plate H	
36.41	36.53	State Highway 85	22.64	21.12	Plate H	Plate H	
36.75	36.80	Whisman Road	22.87	21.12	Plate H	Plate H	
37.06	37.11	State Route 237 West Bound	23.57	21.12	Plate H	Plate H	
38.50	38.62	Mathilda Avenue	23.65	21.12	Plate H	Plate H	
39.27	39.39	Fair Oaks Avenue	27.52	21.12	Plate H	Plate H	
39.28	39.40	Pedestrian Crossing	22.35	21.12	Plate H	Plate H	
39.66	39.71	Wolfe Road	23.01	21.12	Plate H	Plate H	
40.63	40.77	Lawrence Expressway	22.63	21.12	Plate H	Plate H	
42.43	42.50	San Tomas Expressway	22.87	21.12	Plate H	Plate H	
42.79	42.90	Scott Blvd.	23.29	21.12	Plate H	Plate H	
43.53	43.65	Lafayette Pedestrian Crossing	22.75	21.12	Plate H	Plate H	
43.88	43.99	De La Cruz Blvd.	23.31	21.12	Plate H	Plate H	
45.18	45.90	I-880	22.96	21.12	Plate H	Plate H	MT-1 Not Electrified
45.43	46.15	Hedding Avenue	22.57	21.12	Plate H	Plate H	MT-1 Not Electrified.
47.18	47.90	San Carlos Avenue	22.03	21.12	Plate H	Plate H	MT-1 Not Electrified. MT-2 to have track undercut to achieve 22.42' clearance.



## **EXHIBIT 6**

