Appendix J

Preliminary Overhead Contact System/Electrical Safety
Zone/Tree Impact Maps
Appendix J: Preliminary Overhead Contact System (OCS)/Electrical Safety Zone (ESZ)/Tree Impact Maps

This appendix contains preliminary maps of the outer edge of the Overhead Contact System (OCS), the outer edge of the electrical safety zone (ESZ), and associated tree effects.

These maps show the outermost alignment of the OCS based on an assumed 9 to 11 feet offset from the centerline of the outer electrified track in most cases. In some cases, there is insufficient space between electrified and adjacent electrified tracks to put side poles adjacent to the electrified track. In those cases, then the OCS poles would be put on the outside of the electrified tracks at a location where there is sufficient clearance.

In two-track areas, these maps show the outer edge of an ESZ based on an assumed 21 foot offset from the centerline of the outer electrified track, in most cases, presuming the use of single cantilever side poles. In multi-track areas, these maps show the outer edge of the ESZ based on an assumed 18-foot offset from the centerline of the outer electrified track, in most cases, presuming the use of portals. A worst-case ESZ outer edge of 24 feet from the outer electrified track is also shown on these maps. This worst-case ESZ is what was used in the Draft EIR.

The tree canopy in the project area is shown as a hatched green zone. The area of tree effects can be visualized by comparing the canopy area to the location of the outer edge of the ESZ. Tree impacts in the tree surveyed areas are shown by color-coding the tree location dots and are based on the likely ESZ offsets in the FEIR of 21 feet in two-track areas and 18 feet in multi-track areas. The Tree Impact Codes within survey areas are as follows:

- **Green** = Trees that will likely not be affected.
- **White** = 50% of trees with this designation will likely be pruned and 50% of the trees will have no impact. Note, this designation does not mean 50% of the tree will be pruned; it means that based on the distance class of the tree, there is a 50% chance of pruning and a 50% chance of no impact.
- **Prune** = Trees that will likely be pruned
- **25% Remove** = 25% of the trees with this designation will likely be removed; the 75% of trees in this designation that are not removed will be pruned. This designation means that based on the distance class of the tree, there is a 25% chance of removal and a 75% chance of being pruned.
- **50% Remove** = 50% of the trees with this designation will likely be removed; the 50% of trees in this designation that are not removed will be pruned. This designation means that based on the distance class of the tree, there is a 50% chance of removal and a 50% chance of being pruned.
- **Remove** = Trees that will likely be removed.

In some areas, the required ESZ may be wider than the Final EIR likely widths noted above up to the worst-case Draft EIR ESZ offset of 24 feet due to site-specific considerations such as curve requirements, trackside signal and other infrastructure, or other considerations. Thus tree impacts for the project would be somewhere between the Draft EIR and Final EIR estimates (before
application of Mitigation Measures B10-5). The reader can see tree impacts with the different ESZ lines presented in these maps.

These maps are preliminary maps based on GIS analysis and are subject to positional uncertainty in terms of track locations, tree locations, JPB ROW location, and OCS and ESZ alignments. These maps are not based on survey-level data. These maps are also based on preliminary engineering which may change in the final design process. Thus, actual ROW encroachment and tree effects may vary from that shown in these maps. These maps are thus only for the purposes of disclosure of the general type and extent of project impacts for the EIR informational purposes only.

In order to find specific areas along the JPB ROW, one needs to use the index maps as follows:

- Start with the first **Index Map** to identify your general area of interest (Grids A through J).
- Then turn to the **Grid Index Map** of your area of interest, which will have a map showing the specific numbered maps.
- Then open the **Grid Maps** to find the specific maps for your area of interest.
- For example, if your area of interest is the area around the Bayshore Station in San Francisco/Brisbane:
  - Open the Index Map to identify Grid “B” as your general area of interest.
  - Review the Grid B Index Map and identify individual maps 35 through 38 as showing areas around the southern part of San Francisco/northern part of Brisbane.
  - Then turn to individual Maps 35 through 38 in the Grid B Map Set to find your specific area of interest.

Owners of private property that may be affected by Caltrain acquisition of property in fee (where the OCS encroaches on private property) or acquisition of safety zone easements (where the ESZ encroaches on private property) were notified at the time of the DEIR comment period. Example letters sent to private property owners are included after the index maps.
Sources for the following maps:
Streetmap, ESRI 2013; Imagery, ESRI 2013; Tracks, Caltrain 2013; Mile Post, Caltrain 2013; Right of Way, Caltrain 2013; Parcels, San Francisco County 2013, San Mateo County 2013, Santa Clara County 2013*

*Reproduced with permission granted by County of Santa Clara, (July, 2007) County of Santa Clara. Copyright (2013), County of Santa Clara, all rights reserved. Disclaimer the GIS data is provided “as is”. The County makes no warranties, express or implied, including without limitation, any implied warranties or merchantability and/or fitness for a particular purpose, regarding the accuracy, completeness, value, quality, validity, merchantability, suitability, and condition, of the GIS data. User’s of County’s GIS data are hereby notified that the current public primary information sources should be consulted for the verification of the data and information contained herein. Since the GIS data is dynamic, it will by its nature be inconsistent with the official county assessments roll file produced by the office of the assessor. Any use of the County’s GIS data without consulting current public records for verification is done exclusively at the risk of the party making such use.
Memorandum

Date: March 4, 2014

To: [PROPERTY OWNER]

From: Caltrain Modernization Program

Re: Peninsula Corridor Electrification Project
Potential Right of Way Encroachment
Overhead Contact System / Electrical Safety Zone
[PROPERTY AT [ADD ADDRESS], APN XXX]

The Peninsula Corridor Joint Powers Board (JPB) is proposing the Peninsula Corridor Electrification Project (the “Proposed Project”), which would electrify the Caltrain corridor between San Jose and San Francisco to allow Caltrain to operate electrified trains for commuter rail service.

A Draft Environmental Impact Report (DEIR) has been completed pursuant to the requirements of the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts of the Proposed Project. A Notice of Availability (NOA) for the DEIR is included with this letter. It provides details on the Proposed Project, informs you of where the DEIR can be reviewed and provides details about where comments on the DEIR can be submitted.

The purpose of this notice is to inform you that preliminary analysis for the DEIR shows there may be a need to acquire property rights in fee and/or easement in limited areas outside the Caltrain right of way (ROW) on your property, to support the Proposed Project. This is only a preliminary determination. Given that the DEIR is based on preliminary design, it is not known definitively if the Proposed Project will require rights from your property. That determination will be made during the subsequent design phase.

The Proposed Project includes installation of an Overhead Contact System (OCS) consisting of poles and wires to carry the electricity used by electrified trains. The attached figure, Figure 2-8 from the Draft EIR, shows the OCS for a typical situation along the Caltrain ROW using side poles.

The Draft EIR shows that most of OCS alignment would be within the Caltrain ROW. However, there are a few locations where the OCS poles may need to be located slightly outside the current Caltrain ROW. In addition to the placement of poles and wires, an electrical safety zone (ESZ) in needed for the 10 feet beyond the OCS infrastructure in order to provide for electrical
safety around the energized portions of the OCS. There cannot be trees or structures within the ESZ. Thus, in addition to the OCS alignment (which the JPB proposes to acquire in fee), the ESZ could also encroach on your property. While the JPB does not propose to acquire ESZ areas in fee, the electrical safety easement could restrict actions such as maintaining trees within 10 feet of the OCS, structures within 6 feet, as well as other improvements or activities incompatible with electrical safety requirements.

The JPB has not made a definitive determination as to if any rights will be required from your property to support the Proposed Project. Before making such determinations, the JPB must first comply with the requirements of CEQA through the environmental process, which the JPB proposes to complete in late 2014. Final design for the Proposed Project is scheduled to commence in 2015. During the final design process, the JPB will determine the set location for the OCS poles and wires and will identify the actual areas where property rights would need to be acquired from private property owners to support the Proposed Project. If encroachment on your property is necessary to support the Proposed Project, the JPB would follow state and federal regulations for public acquisition of private property, including all notification procedures.

The JPB understands that any purchase of private property rights is a concern for any property owner. Where feasible, and as consistent with operational, maintenance, and safety requirements including all regulatory requirements, the JPB will seek to minimize the acquisition of property rights outside the Caltrain ROW. The JPB encourages concerned property owners to participate in the CEQA process and to submit comments on the Draft EIR during the comment period as described in the enclosed Notice of Availability.

Additional information about the project is available on the web at www.caltrain.com/electrification. Comments will be accepted during the 60-day comment period from February 28 to April 29, 2014. Comments may be submitted by email to: electrification@caltrain.com, with the subject line “Peninsula Corridor Electrification Project”. Alternatively, comments may be submitted by mail to:

Peninsula Corridor Joint Powers Board (Caltrain)
Attn: Stacy Cocke, Senior Planner
1250 San Carlos Ave.
P.O. Box 3006
San Carlos CA 94070-1306
Figure 2-8
Vegetation Clearance
Peninsula Corridor Electrification Project
Memorandum

Date: March 4, 2014

To: [PROPERTY OWNER]

From: Caltrain Modernization Program

Re: Peninsula Corridor Electrification Project
Potential Right of Way Encroachment for Electrical Safety Zone
[PROPERTY AT [ADD ADDRESS], APN XXX]

The Peninsula Corridor Joint Powers Board (JPB) is proposing the Peninsula Corridor Electrification Project (the "Proposed Project"), which would electrify the Caltrain corridor between San Jose and San Francisco to allow Caltrain to operate electrified trains for commuter rail service.

A Draft Environmental Impact Report (DEIR) has been completed pursuant to the requirements of the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts of the Proposed Project. A Notice of Availability (NOA) for the DEIR is included with this letter. It provides details on the Proposed Project, informs you of where the DEIR can be reviewed and provides details about where comments on the DEIR can be submitted.

The purpose of this notice is to inform you that preliminary analysis for the DEIR shows that there may be a need to acquire property rights in easement for an electrical safety zone (ESZ) in limited areas outside the Caltrain right of way (ROW) on your property, to support the Proposed Project. This is a preliminary determination. Given that the Draft EIR is based on preliminary design, it is not known definitively if the Proposed Project will require rights from your property. That determination will be made during the subsequent design phase.

The Proposed Project includes installation of an Overhead Contact System (OCS) consisting of poles and wires to carry the electricity used by electrified trains. The attached figure, Figure 2-8 from the Draft EIR, shows the OCS for a typical situation along the Caltrain ROW using side poles. In addition to the placement of poles and wires, an electrical safety zone (ESZ) is needed for 10 feet beyond the OCS infrastructure in order to provide for electrical safety around the energized portions of the OCS. There cannot be trees or structures within the ESZ. While the JPB does not propose to acquire areas within the ESZ in fee, the electrical safety easement could restrict actions such as maintaining trees within 10 feet of the OCS, structures within 6 feet, as well as other improvements or activities incompatible with electrical safety requirements.
The JPB has not made a definitive determination as to whether any rights will be required from your property to support the Proposed Project. Before making such a determination, the JPB must first comply with the requirements of CEQA through the environmental process, which the JPB proposes to complete in late 2014. Final design for the Proposed Project is scheduled to commence in 2015. During the final design, the JPB will determine the set location for the OCS poles and wires and will identify the actual areas where property rights would need to be acquired from private property owners to support the Proposed Project. If encroachment on your property is necessary to support the Proposed Project, the JPB would follow state and federal regulations for public acquisition of private property including all notification procedures.

The JPB understands that any purchase of private property rights is a concern for any property owner. Where feasible and as consistent with operational, maintenance, and safety requirements including all regulatory requirements, the JPB will seek to minimize the acquisition of property rights outside the current Caltrain ROW. The JPB encourages concerned property owners to participate in the CEQA process and to submit comments on the Draft EIR during the comment period as described in the enclosed Notice of Availability.

Additional information about the project is available on the web at [www.caltrain.com/electrification](http://www.caltrain.com/electrification). Comments will be accepted during the 60-day comment period from February 28 to April 29, 2014. Comments may be submitted by email to: electrification@caltrain.com, with the subject line “Peninsula Corridor Electrification Project”.

Alternatively, comments may be submitted by mail to:

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Peninsula Corridor Electrification Project